Issue 127
PS
1963 Series
THE PREVENTIVE MAINTENANCE MONTHLY
nottingham annual archery contest
FORSOOTH! AND ALL THAT JAZZ... LOUSY MAINTENANCE HATH AGAIN DONE US IN...
Will Eisner

Old Robin Hood and his recon troop might not have been the first known special forces outfit, but they sure brought the art to a high degree of perfection. Just ask the sheriff!

They were effective, even though they were usually outweighed in both manpower and weapons. Why? It's easy—

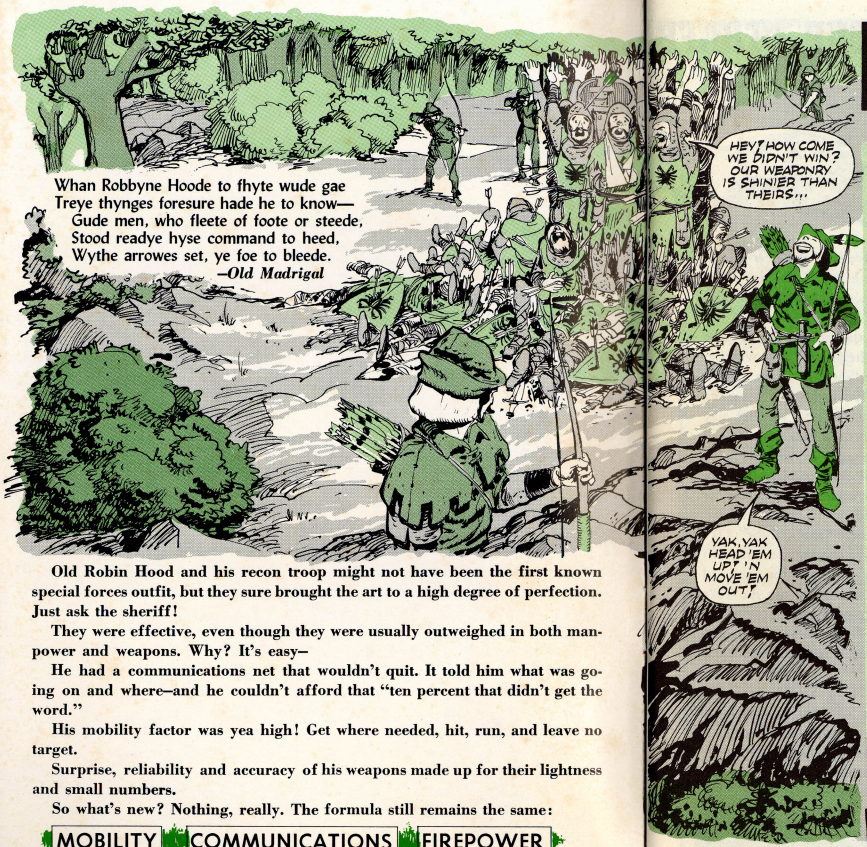
He had a communications net that wouldn't quit. It told him what was going on and where—and he couldn't afford that "ten percent that didn't get the word."

His mobility factor was yea high! Get where needed, hit, run, and leave no target.

Surprise, reliability and accuracy of his weapons made up for their lightness and small numbers.

So what's new? Nothing, really. The formula still remains the same:

MOBILITY | **COMMUNICATIONS** | **FIREPOWER**



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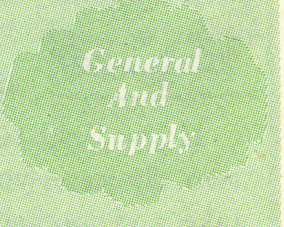

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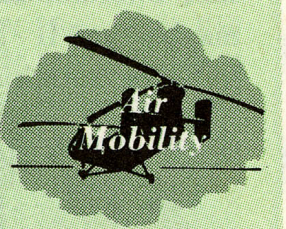

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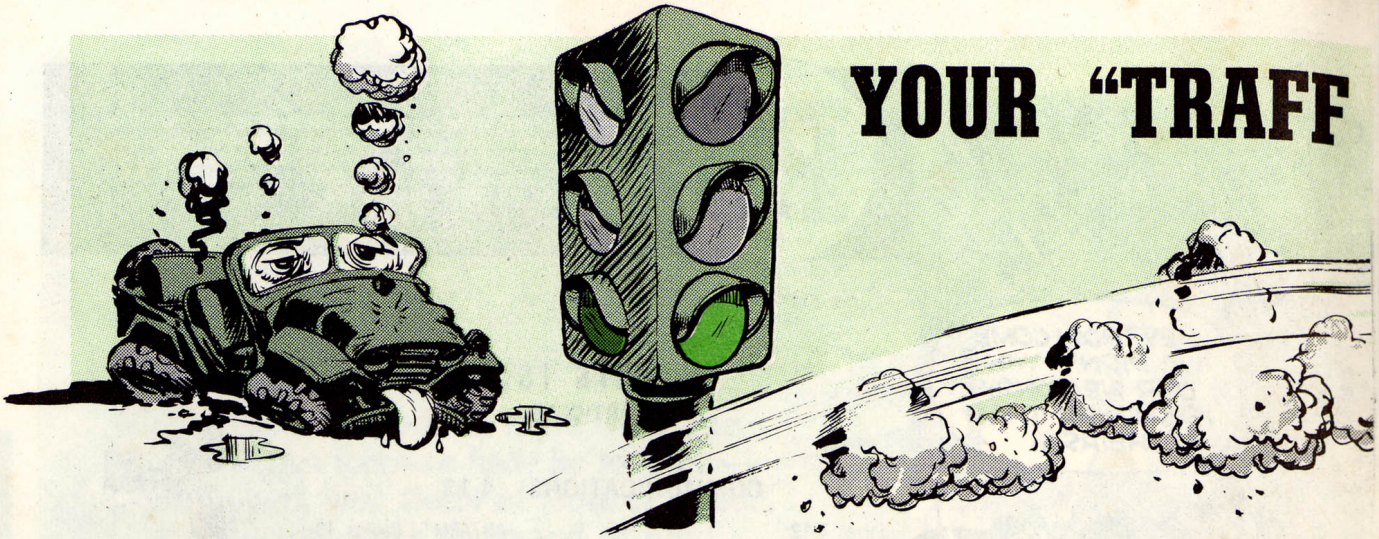
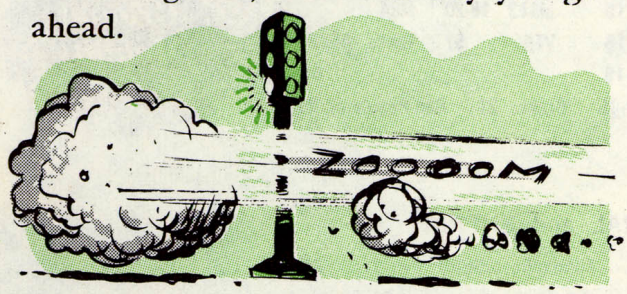


When you drive up to a traffic light you'll find the light is either green, amber, or red.

If it's **green,** then naturally you go ahead.



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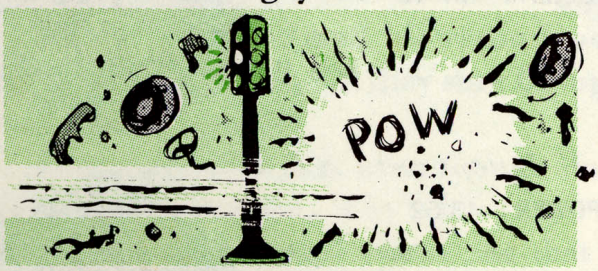

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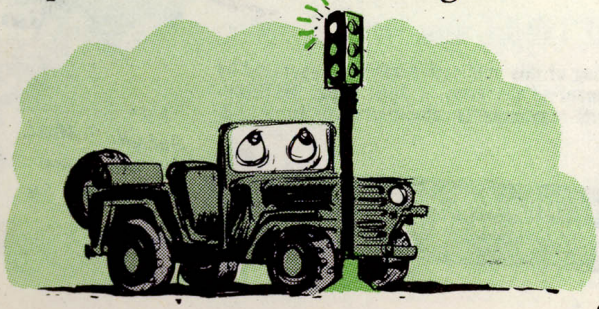

You may have seen the new Equipment Serviceability Criteria TB's. You'll hear them referred to as the "traffic light" TB's.

They serve the same purpose as a traffic light. They'll tell you whether your equipment's ready to go (green or operational); whether it's not quite up to snuff and it may operate like it's supposed to or it may not make it (amber or limited); or whether your equipment will not do what it's supposed to do or is not reliable (red or nonoperational).

So how do these "traffic light" TB's affect you? Your commander may tell you (yes, you the operator, and 2d echelon maintenance) to use the TB's to see how your equipment shapes up. You use DA Form 2404, the maintenance worksheet, to put down what you find.

Now these TB's aren't meant to take the place of your maintenance service on your equipment. They're a check-list to see just how combat-ready your equipment is.

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Here are some you can look for:

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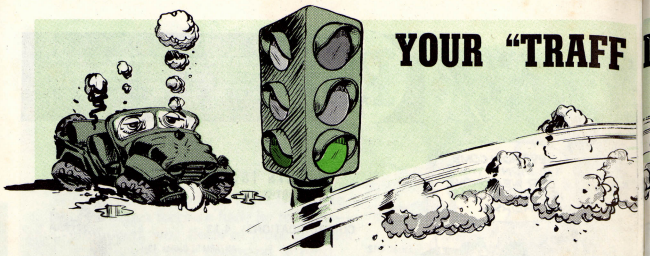

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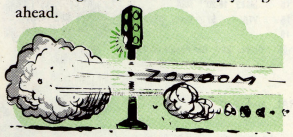

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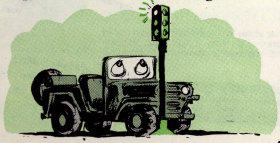

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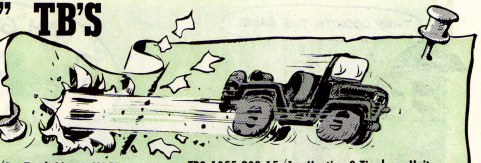

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TB11-5815-204-10/1	AN/VRC-29 mounted in M59
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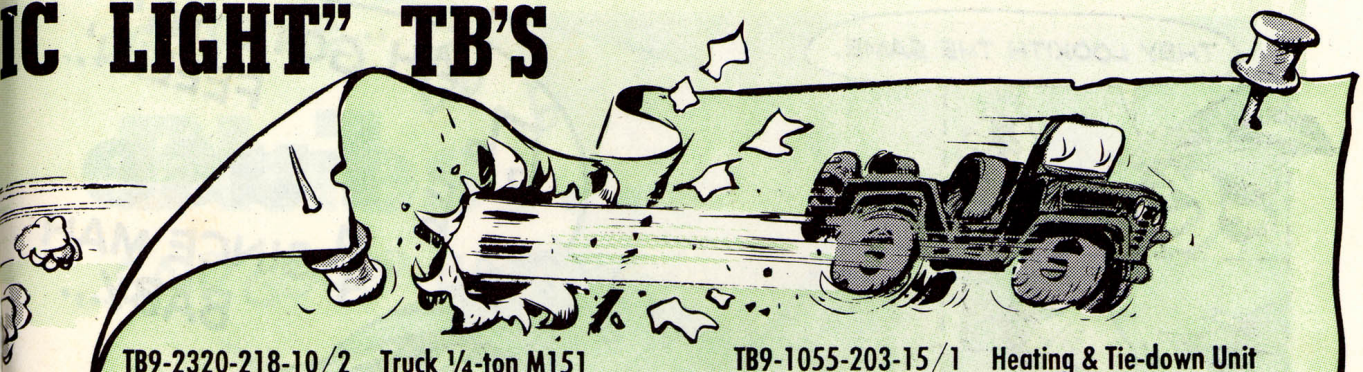

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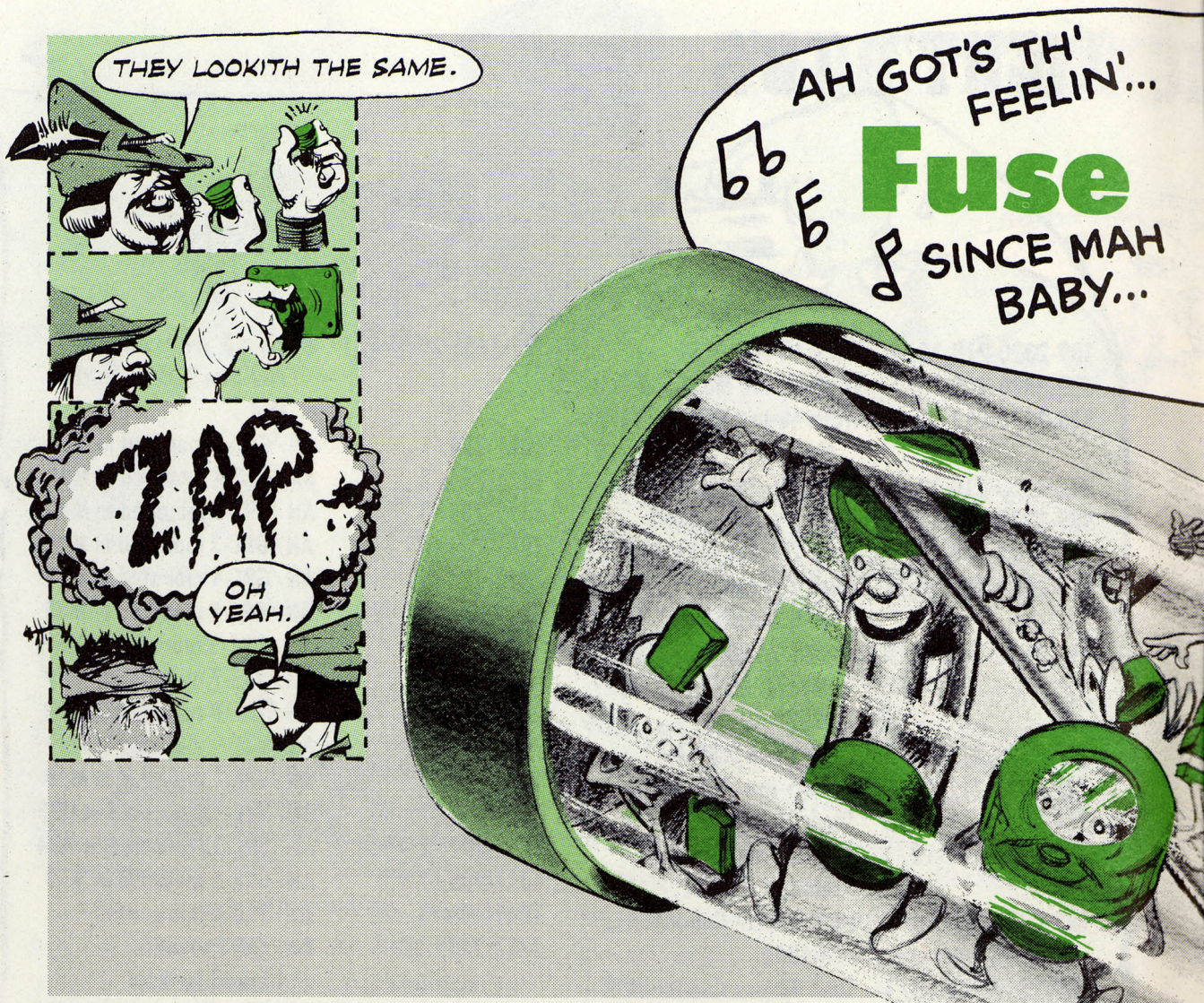
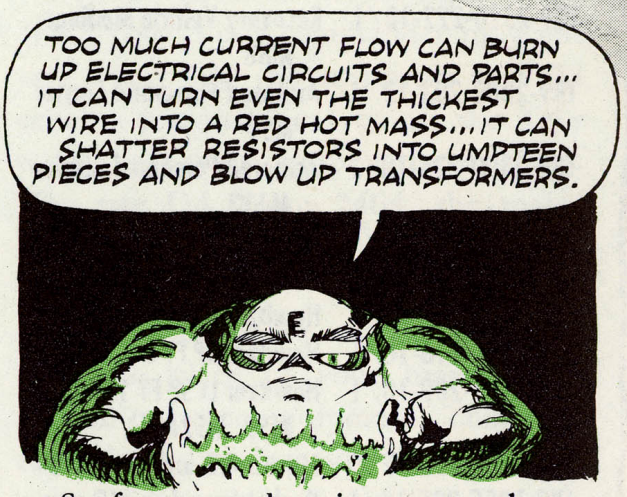


"As long as the new fuse looks like the one in the equipment, what difference does it make?"

You've probably heard this or words to the same effect before. It tells you loud and clear that the speaker doesn't know anything about fuses . . . what they are, how they work, the various types, and their ratings.

And yet, fuses are one of the most common and cheapest items around for saving electric and electronic equipment from the harmful effects of the excessive current flow that comes from insulated circuits that become grounded, short circuits and overloads.



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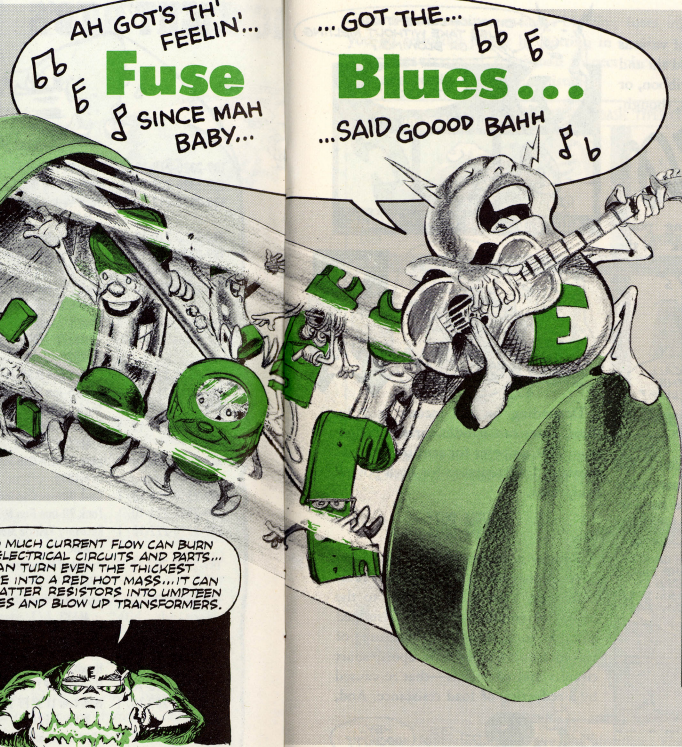

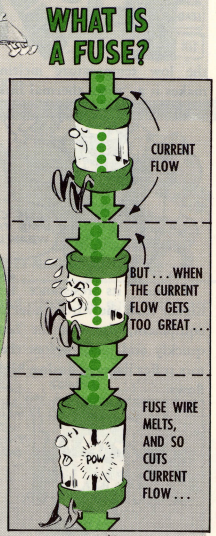

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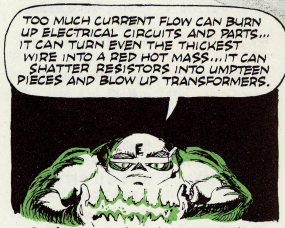

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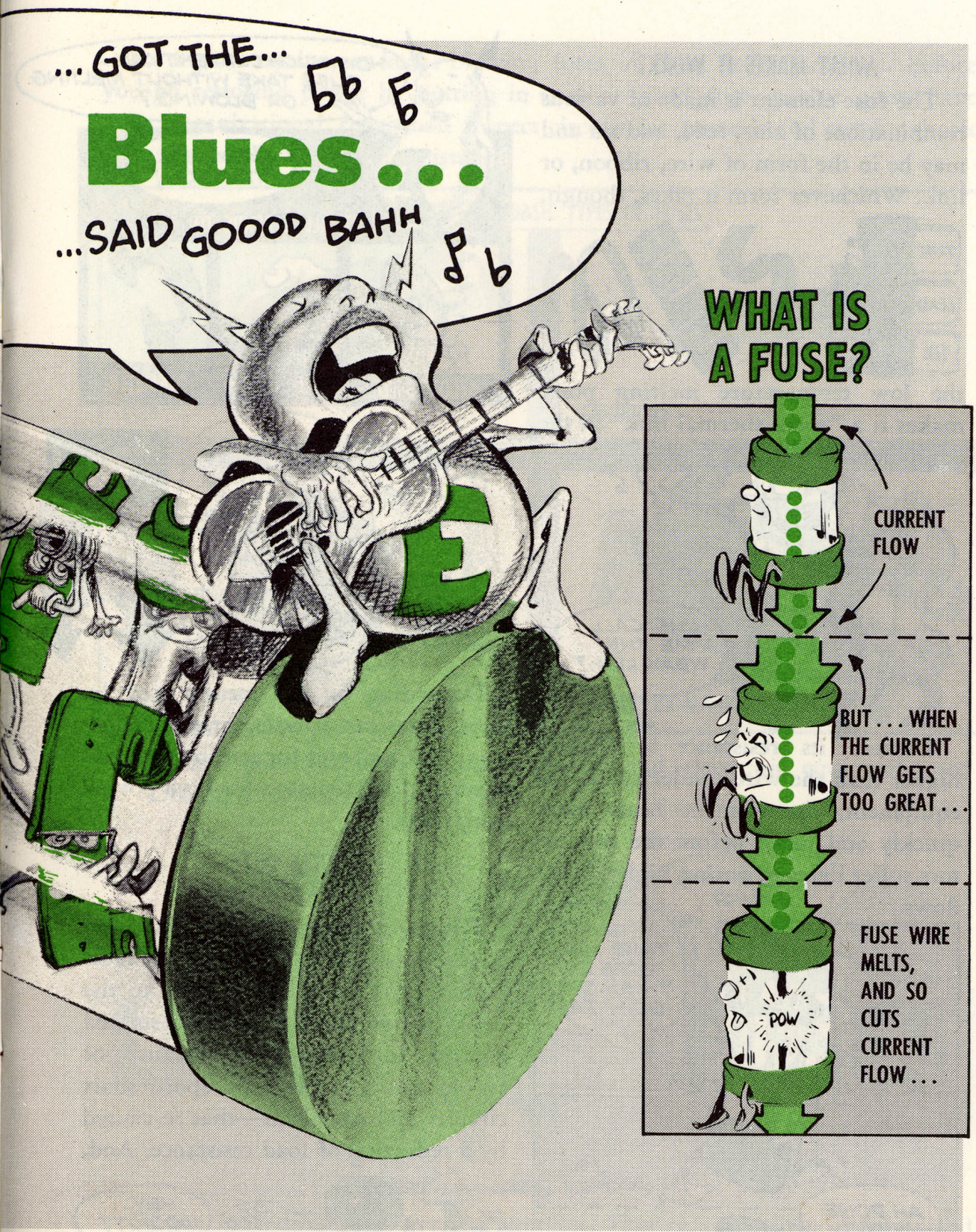
MORE



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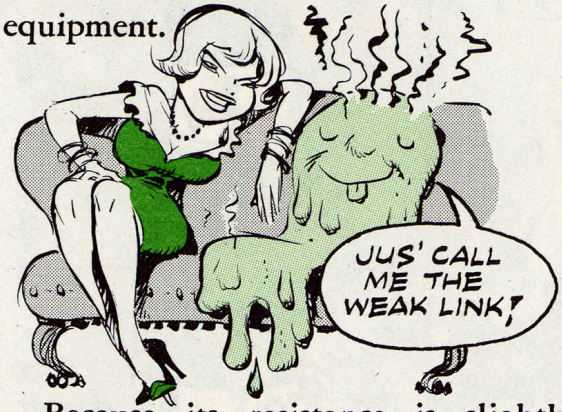
P.S. MORE

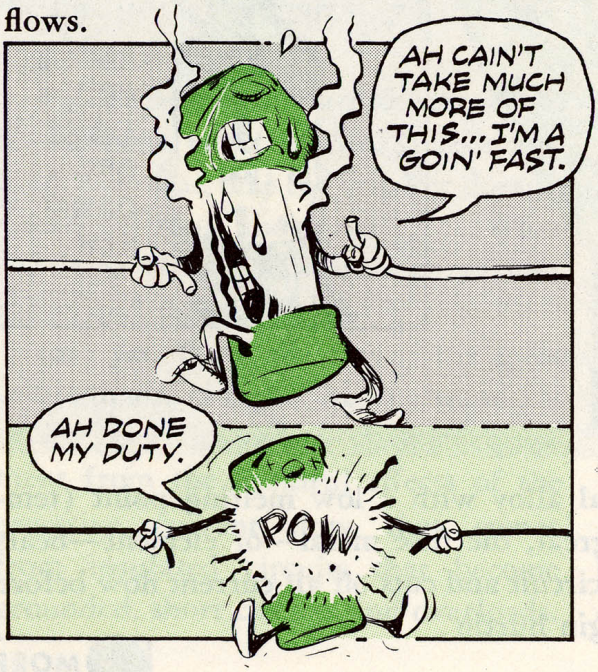
WHAT MAKES IT WORK?

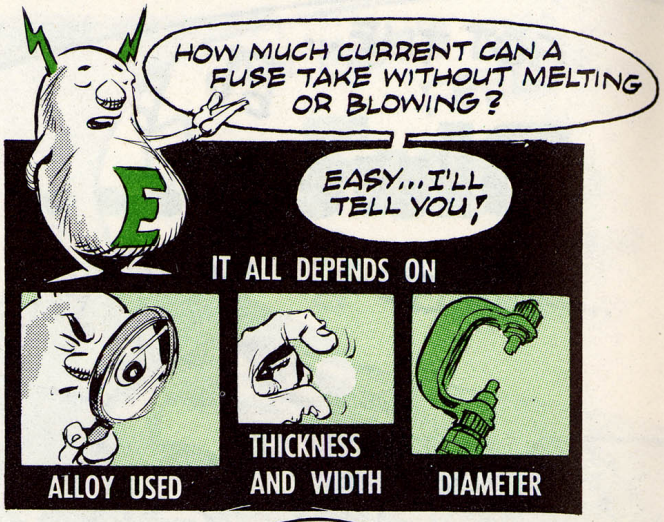
The fuse element is made of various combinations of zinc, lead, and tin and may be in the form of wire, ribbon, or link. Whichever form it takes, though,

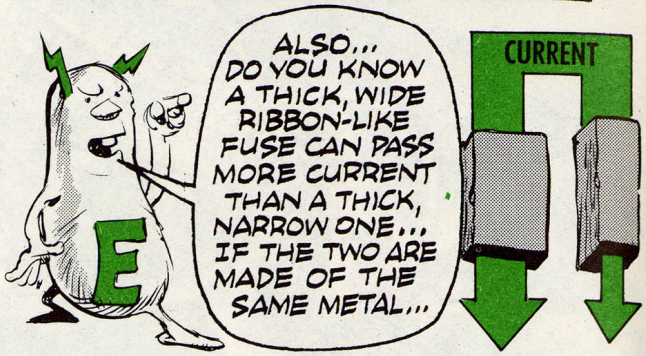
the low temperature melting point makes it a "weak thermal link" in the equipment.



Because its resistance is slightly higher than the wire conductors in the equipment, the element heats more quickly and melts before the conductors suffer damage during high current flows.







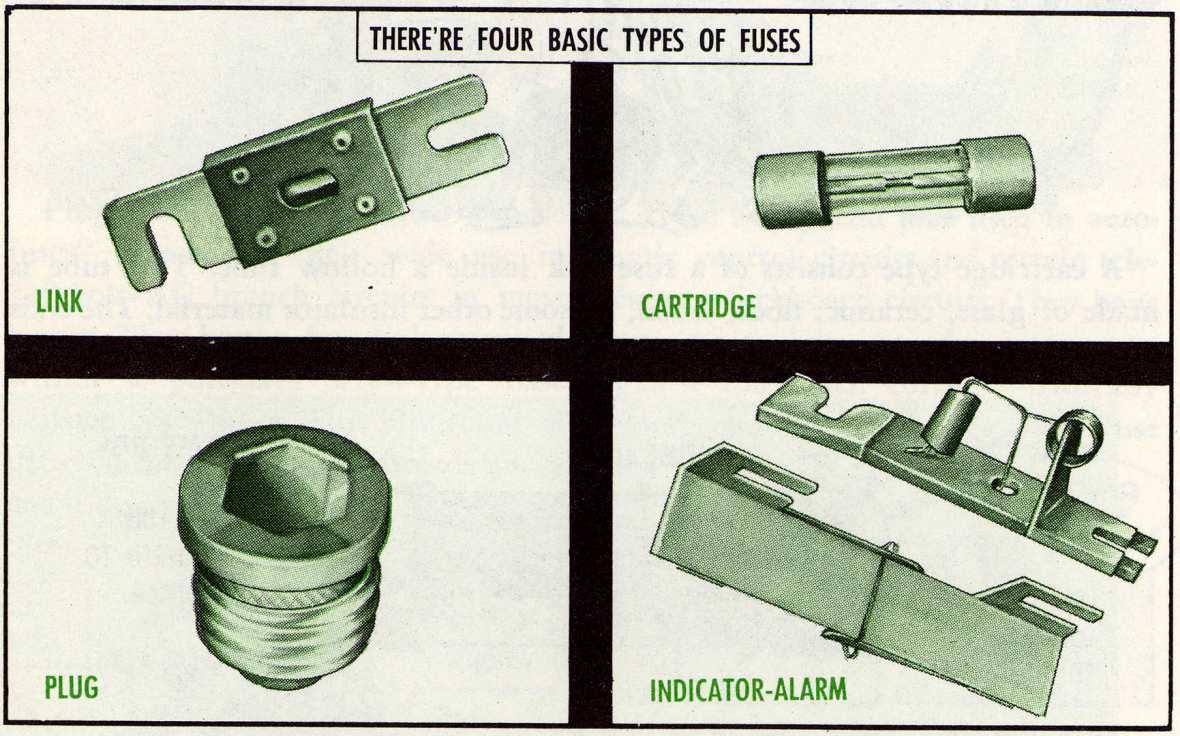
Depending on the metals used in them, fuses can handle current values from .001 amperes for sensitive instruments to 1300 amperes for high-power equipment.

DOUBLE DUTY

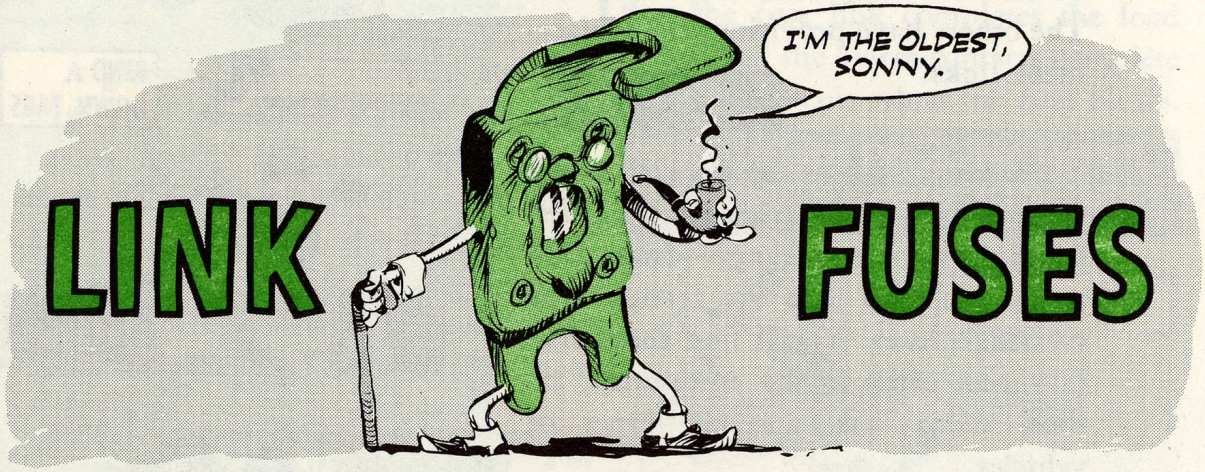
Besides guarding the circuits, fuses have another job . . . they serve as fault indicators. That is, they point to the source of troubles—such as insulated circuits grounding out because of frayed insulation or bare spots, short circuits and overloads—that're caused by a reduction of load resistance. And,

sometimes a blown fuse will warn you of a sudden increase in the applied current.

So, if your equipment keeps blowing fuses in short order, hold up. Before you go restoring power by putting in another good fuse, you've gotta have your organizational repairman inspect circuits for grounds and test for shorts and abnormally low load resistance.



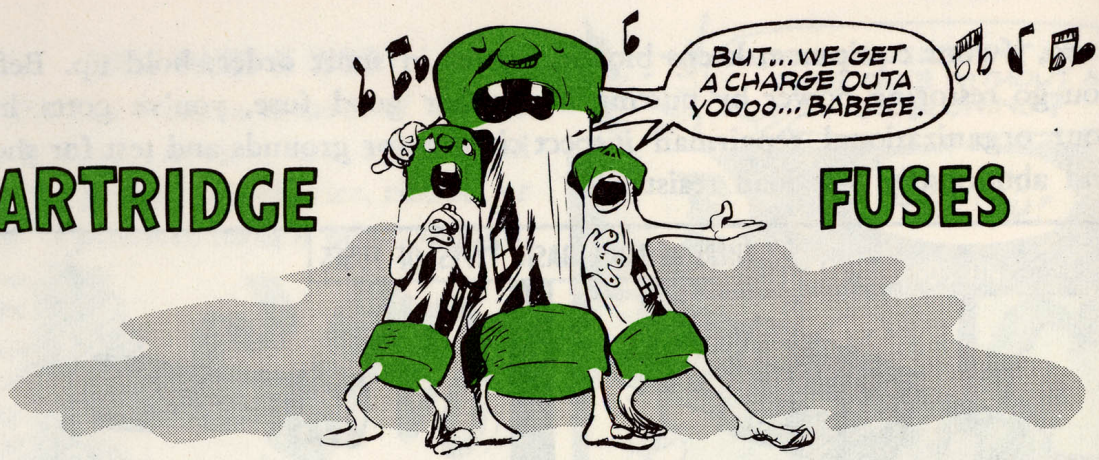
The ones most commonly found in electric and electronic equipment are the cartridge and indicator-alarm types.



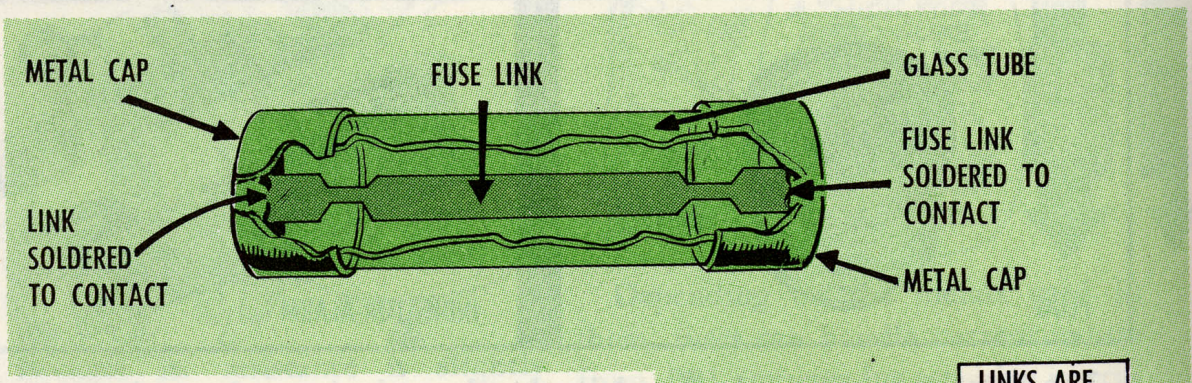
Of the four, link fuses are the simplest. They're just a strip of fuse metal —either wire, ribbon, or flat sections with connecting necks. They were the first type used in electrical equipment, and were either soldered into the circuit with special low-melting solder, or they were fastened under two binding screws in uncovered holders.

PS MORE

CARTRIDGE FUSES



A cartridge type consists of a fuse link inside a hollow tube. This tube is made of glass, ceramic, fiber, wood, or some other insulator material. The ends of the link are connected to metal contacts at either end of the cartridge.

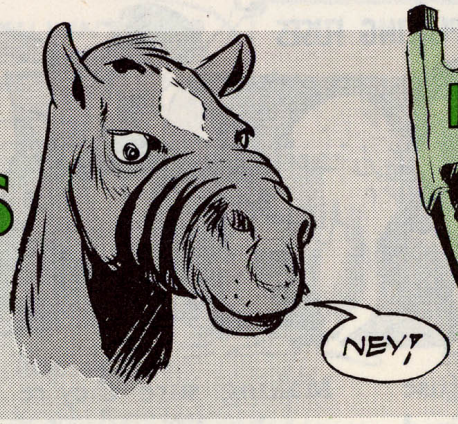


These fuses may be either one-time or renewable. The one-time kind must be thrown away once they've blown. The others have provisions for replacement links.

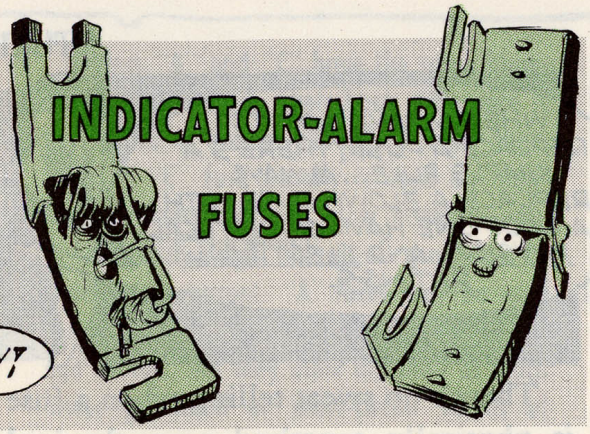
Cartridge fuses are broken down according to their current capacities. In the low-current range—from .001 to 60 amperes—are the ferrule type cartridge fuses. You'll find these critters most often in test equipment, radios, radar sets, and all types of vehicles.

Those with the high-current capacity are the knife-blade type. They're used for currents ranging from 60 to 600 amperes and are found in main fuse boxes and power plant installations.

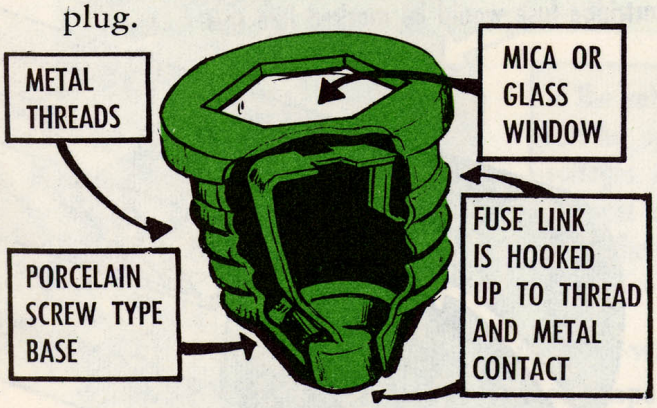
PLUG FUSES



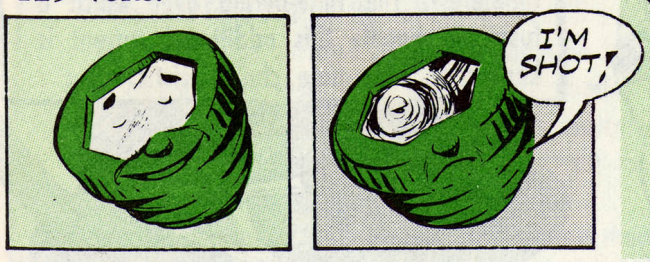
INDICATOR-ALARM FUSES



Plug fuses are often called "house fuses" because of their wide use in 110-volt AC branch circuits in most homes. They have a fuse link mounted within a porcelain screw-type base (Edison-base) plug. This link connects between the metal screw threads and a metal disc contact at the bottom of the plug.

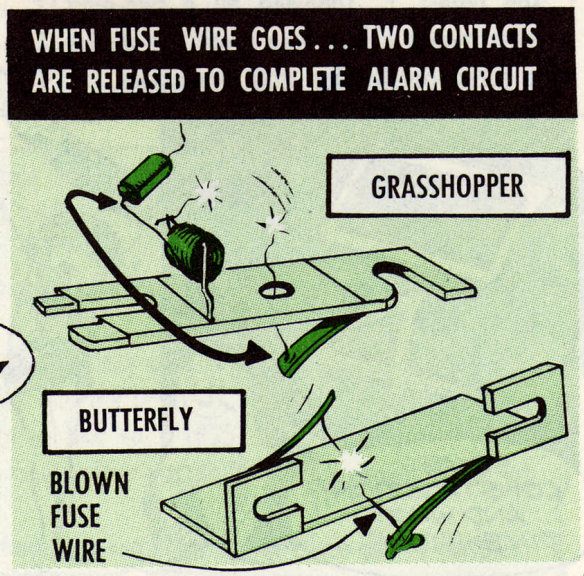


A glass or mica window at the top lets you see whether the fuse has blown. Special material is often used in the fuse to tarnish or cloud the window when the fuse blows. This type has a current capacity ranging from 3 to 30 amperes and is designed to operate in circuits with voltages lower than 125 volts.



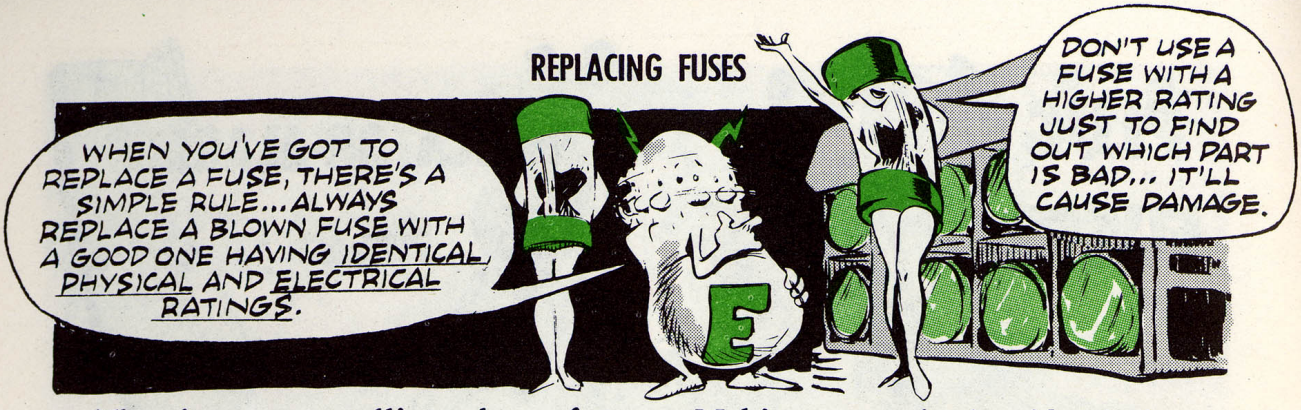
These are special jobs used in automatic control circuits and certain telephone switchboard circuits. They have two main jobs to do . . . protect against too much current—naturally—and give the alarm when the fuse blows.

Here again we have two sub-types—grasshopper and butterfly. Both have a fuse link holding two springloaded alarm contacts. They're designed so that the fuse link completes the load circuit and the alarm contacts complete an alarm circuit when the fuse blows.



PS MORE

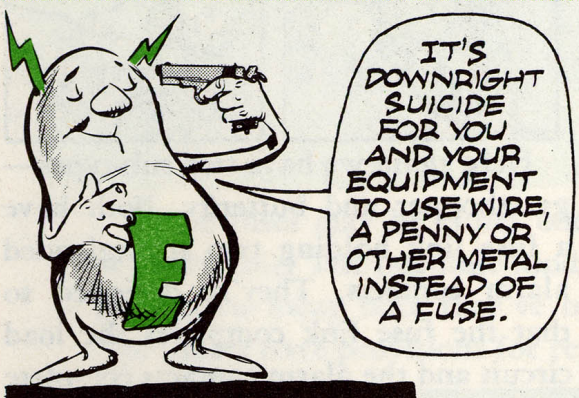
REPLACING FUSES

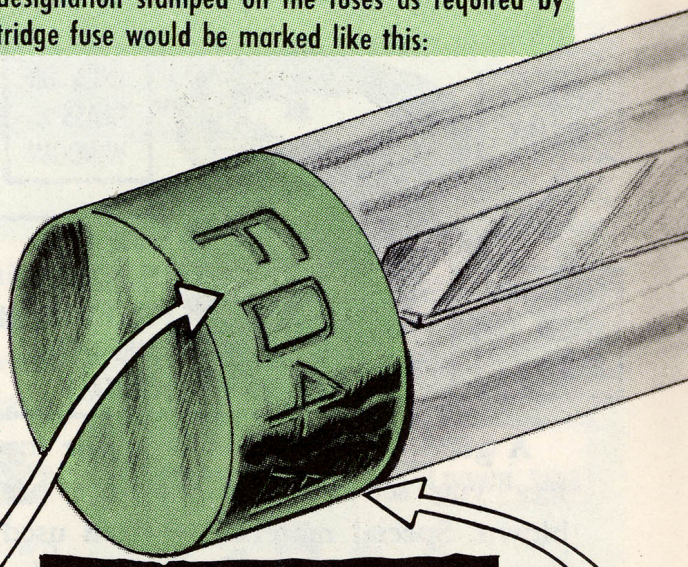


There's no sweat telling when a fuse is physically oversized or undersized because it won't fit the fuse holder. But, it's a different matter when it comes to making sure the good fuse and the blown one have the same voltage and current ratings and blow-time characteristics.

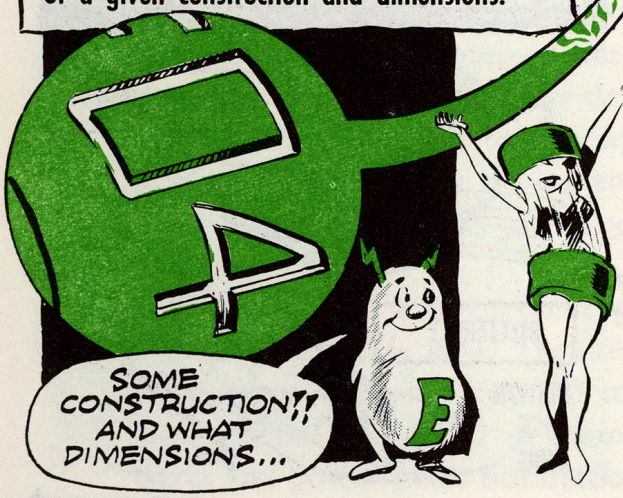
Making sure they're identical can mean the difference between trouble-free operation of your equipment or . . . one that's burned up, or keeps blowing fuses, or sends your repairman trouble-shooting in the wrong place. It's as simple as that.

To help you pick your fuse twins, here's a type designation stamped on the fuses as required by Military Spec. MIL-F-151600, 1 Feb 61. A typical cartridge fuse would be marked like this:





The letter "F" followed by a two-digit number means a fuse type protective device of a given construction and dimensions.



Next we move over to the letter "A". This tells the blow-time characteristic. All fuses are rated to withstand, for a short time, certain values of surge-current greater than the value indicated in the current rating (amperes). The time-period over which a fuse can handle this additional current is known as blow-time characteristic.

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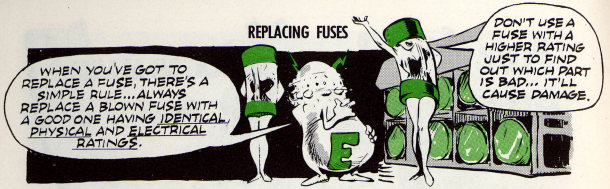

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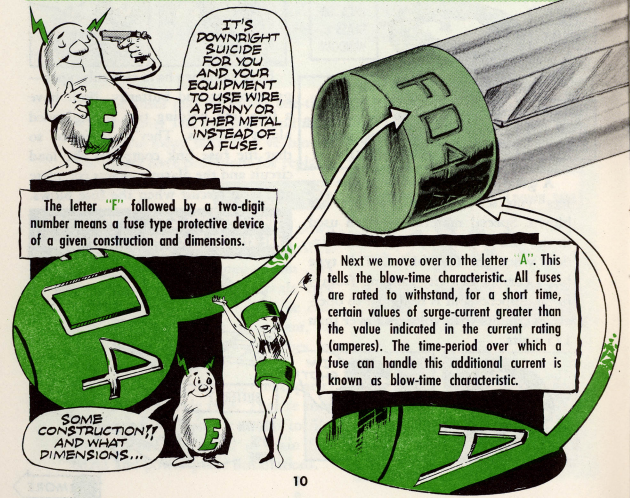

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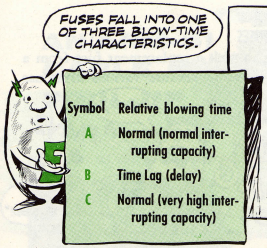


Symbol	Relative blowing time
A	Normal (normal interrupting capacity)
B	Time Lag (delay)
C	Normal (very high interrupting capacity)

Letters "A" and "C" have the same blow-time characteristics. Their basic difference is the values of current needed to make them blow. A "C" fuse usually is used on high-power circuits and will blow instantly only at extremely high values of grounded or short-circuit current. "A" fuses may be used for all styles, all current ratings, and all voltage ratings, but they blow instantly at much lower grounded or short-circuit values of current.

VOLTAGE

The voltage rating of a fuse is the maximum voltage that can be applied to a BLOWN fuse without risking arc-over voltages. After a fuse blows, it must protect the circuit against voltages which could arc across the break and thereby complete the circuit again.

This problem is overcome in two ways. The first is by use of longer fuses which, when blown, leave wider gaps in the circuit.

When this isn't practical, the fuses are filled with a special, non-flammable, insulating quenching-dust. Fuses with a "C" characteristic have this special material.

Before the latest "mil spec" came out, voltage ratings were shown by a letter symbol. Under that system, a 32-volt fuse was stamped with the letter "A". One with a 10,000-volt rating was marked "P".

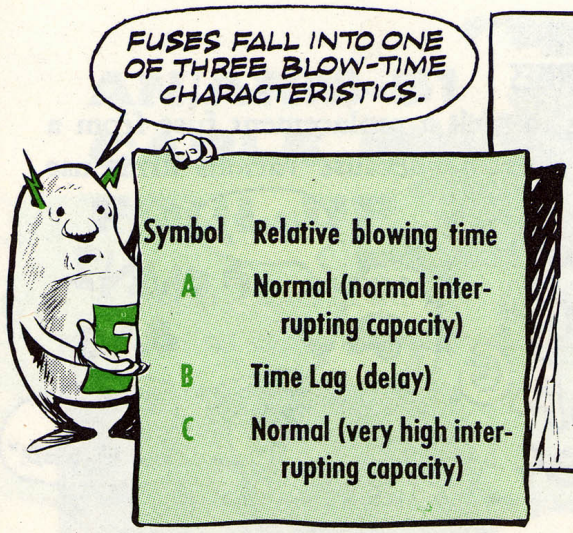
Now it's simplified and is the same as commercial designations. The rating is written out in numbers followed by the letter "v". You'll see "32v", "10,000v", etc.

Current ratings are also shown the same on both military and commercial fuses. But not too long ago military fuses wore a three-digit number and the letter "R". The "R" represented the decimal point so a 1¼-ampere fuse was indicated like so, "1R25". Now it's just "1¼A".

Current rating is the most commonly known fuse rating and tells the maximum value of current the fuse can carry without blowing.

The final symbol, "S" is used only where there is a requirement for silver plated ferrules.

MORE



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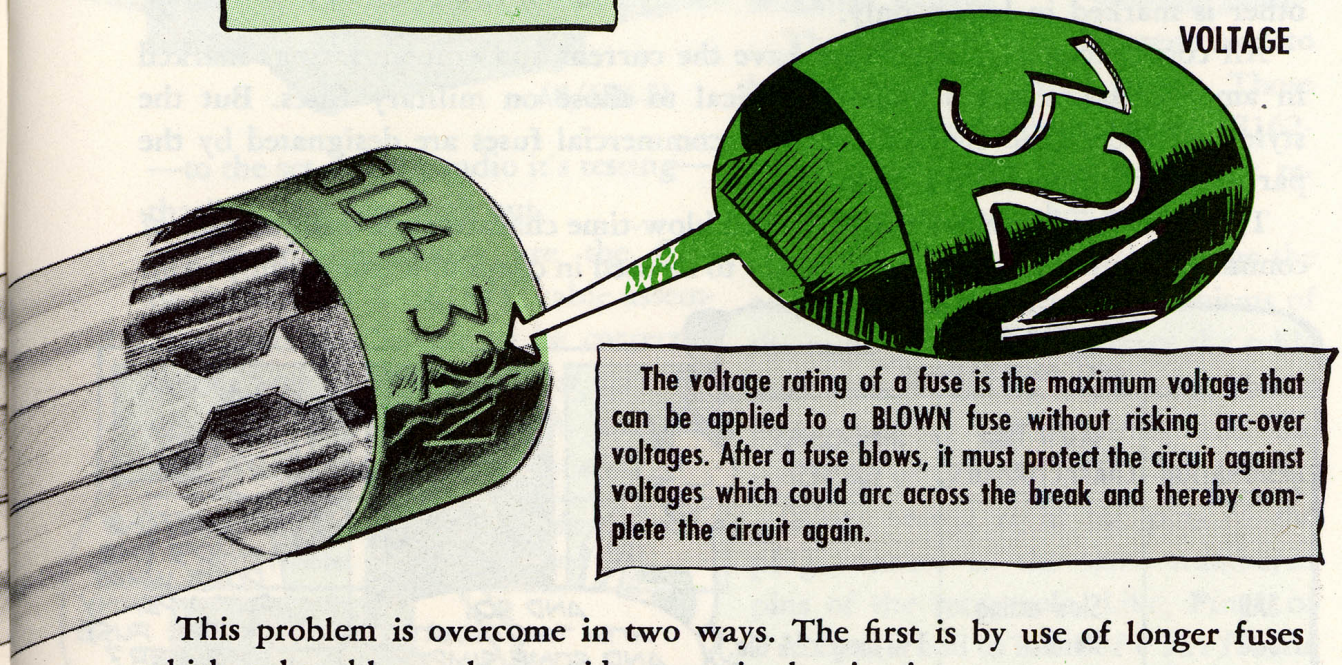

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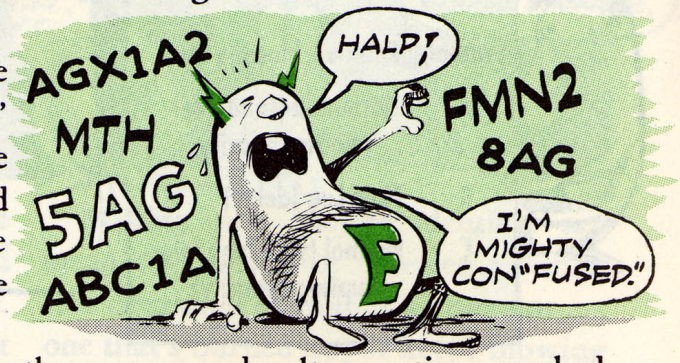
P.S. MORE

COMMERCIAL FUSES

Sometimes you may find yourself trying to pick a replacement fuse from a commercial source. This could cause some sweating because various firms use different designations.

F'rinstance. A quick-acting cartridge fuse may be marked "8AG, 1A, 250v" by one firm. Yet, the same fuse made by another company may be designated "AGX 1A 250v". Notice the first one uses a number-letter code, while the other is marked in letters only.

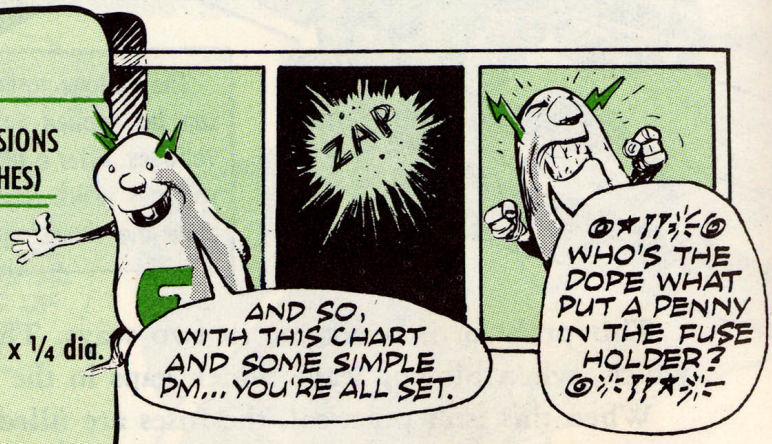


All commercial cartridge fuses have the current and voltage ratings marked in ampere and voltages values identical to those on military fuses. But the style and blow-time characteristics of commercial fuses are designated by the particular manufacturer's code.

The table below shows the style and blow-time characteristic designations of commercial cartridge fuses most likely to be used in communications equipment.

CARTRIDGE FUSE DESIGNATIONS

DESIGNATION	BLOW-TIME CHARACTERISTICS	DIMENSIONS (INCHES)
3AB	Slow-acting	
3AG	Normal	1¼ long x ¼ dia.
3AG Slo-Blo	Slow-acting	
4AG	Normal	
4AG Slo-Blo	Slow-acting	1¼ long x 13/32 dia.
5AG	Normal	
5AG Slo-Blo	Slow-acting	1½ long x 13/32 dia.
8AG	Fast-acting	1 long x ¼ dia.
ABC	Fast-acting	
AGC	Fast-acting	1¼ long x ¼ dia.
AGX	Fast-acting	1 long x ¼ dia.
FMN	Fast-acting	13/32 long x 1½ dia.
MDL	Slow-acting	
MDX	Slow-acting	1¼ long x ¼ dia.
MTH	Fast-acting	



This all means you've got to be mighty careful in checking each numeral and letter to pick the right fuse as a replacement.

Do that and you shouldn't have to sing the fuse blues.

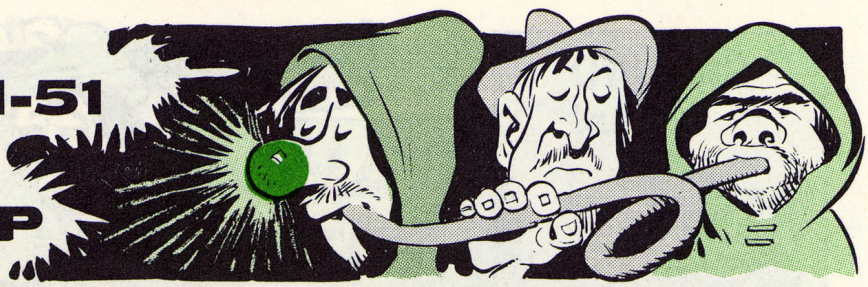
PM on your fuses is short and simple.

Keep an eye on the fuse ends for signs of overheating and corrosion.

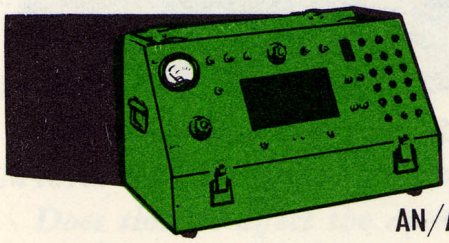
You can clean the ends with four-ought sandpaper, but be sure to wipe 'em good with a clean cloth.

Fuse clips should be kept clean and tight so you'll get a good contact.

AN/ARM-51 CABLE FOUL-UP



A coupla' cables of the AN/ARM-51 radio test set can give a one-two punch

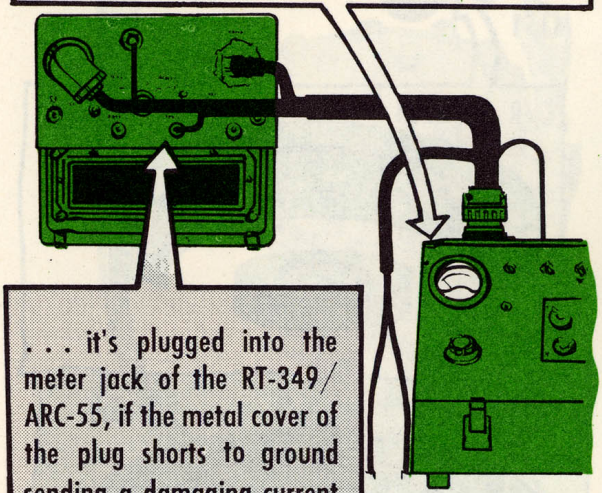


AN/ARM-51

—to the set and the radio it's testing—that'll knock 'em both out.

The trouble-makers are the CX-6670/U and CX-6673/U cable assemblies, and they've got to be corrected before you use 'em. The test set's for the AN/ARC-27 and 27A and the AN/ARC-55 and 55B radio sets.

Plug P109 of the CX-6673 can damage the M-101 meter of the test set when . . .



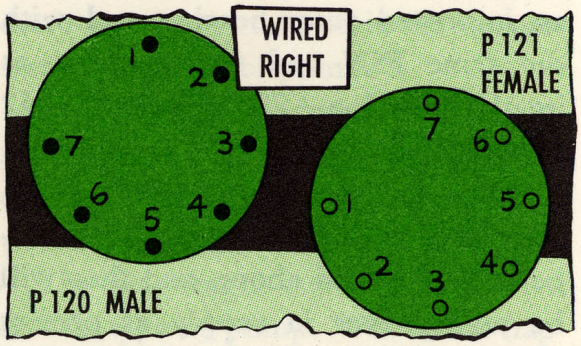
. . . it's plugged into the meter jack of the RT-349/ARC-55, if the metal cover of the plug shorts to ground sending a damaging current thru the meter.

You can avoid damage if you replace the P109 with plug type PJ-055B, requisitioned with FSN 5935-192-4760. The PJ-055B has a shell of insulating material.

The CX-6670 is a different bird to handle, since it's wired wrong. Those secured under Purchase Order 18162-PC-61-A1-51 have pins wired the reverse of what they should be.

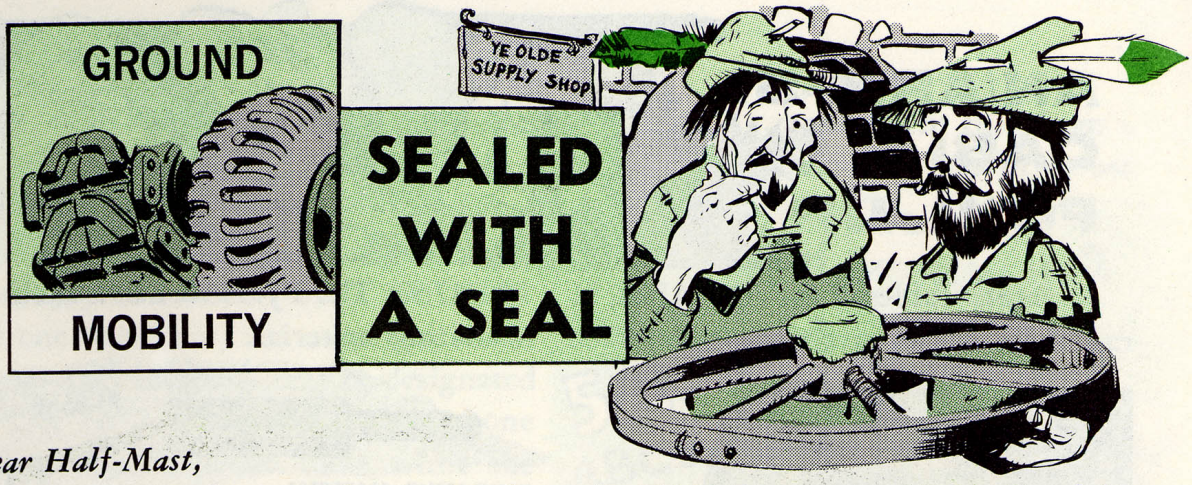
Use it as it is and you'll damage the amplifier and oscillator mechanisms of the radio you're testing, since the cable interconnects the radio chassis with the main receiver RF amplifier and the spectrum oscillator.

When wired right the pins of the plug connect to the same numbered pins of the receptacle. Like, Pin 1 of P120 male end to Pin 1 of P121 female



end of the cable. From the gap in the mating ends the plug is numbered 1 to 7 clockwise and the receptacle is numbered 1 to 7 counterclockwise.

And friend, if you don't have the right tools for the repair, send the cables up to third echelon for the job.



Dear Half-Mast,

What's with the inner bearing seal on the M151 ¼-ton truck? It's listed in TM 9-2320-218-20P (May 60), Fig 37, Item 4, as Ord number 7996804, FSN 2530-678-1759.

When I ordered a new one, supply gave me a seal with a flange on the outboard end and a taper on the inboard end. The Ord number—7996804—is the same, though.

Should I use it or did somebody make a goof?

SP5 R.S.P.

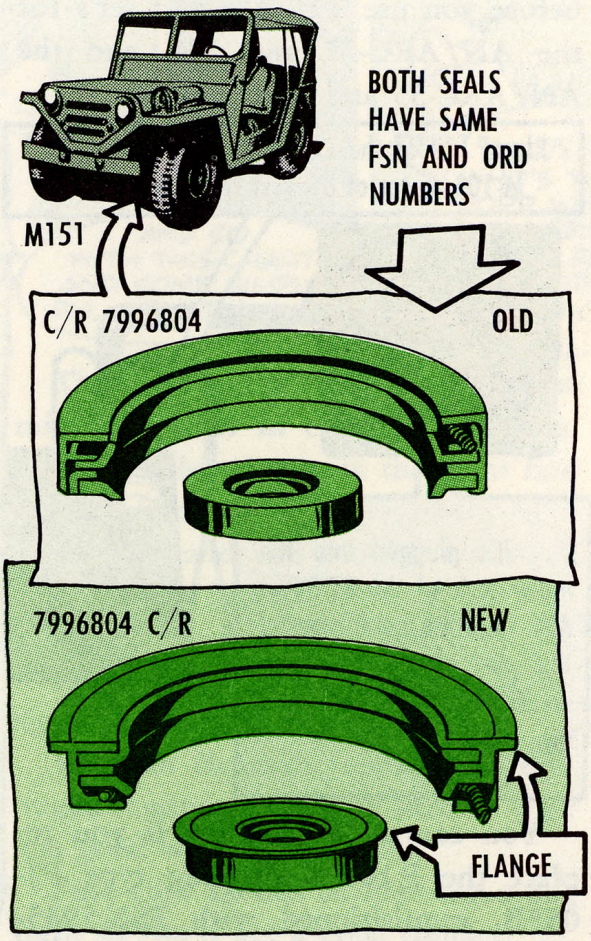
Dear Specialist R. S. P.,

No goof—just an improvement, so use it in good health.

Supply gave you the new type inner bearing seal which works better even though you get it under the same FSN and Ord number . . . likewise there is an improved outer bearing seal with the same FSN and Ord number as its older version—FSN 2520-678-3042 (7996801).

These new seals are standard equipment in M151's with registration numbers 2C9349 and above, and they will be taking over in supply as present stocks of the old seals are exhausted. So-o-o-o, don't be surprised whichever type seal you get.

There won't be any retrofit for M151's below 2C9349 and you can use either the old or the new seals with any M151.



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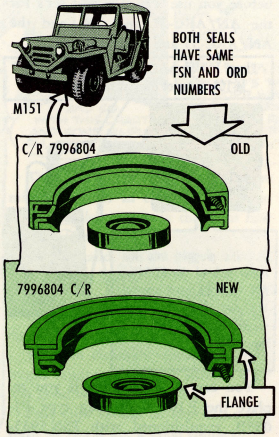
Dear Specialist R. S. P.,

No goof—just an improvement, so use it in good health.

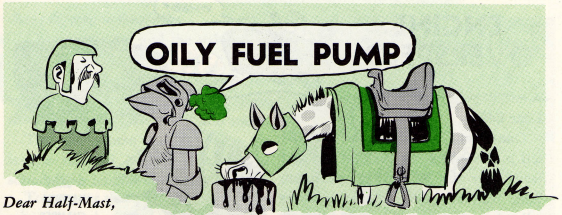
Supply gave you the new type inner bearing seal which works better even though you get it under the same FSN and Ord number . . . likewise there is an improved outer bearing seal with the same FSN and Ord number as its older version—FSN 2520-678-3042 (7996801).

These new seals are standard equipment in M151's with registration numbers 2C9349 and above, and they will be taking over in supply as present stocks of the old seals are exhausted. So-o-o-o, don't be surprised whichever type seal you get.

There won't be any retrofit for M151's below 2C9349 and you can use either the old or the new seals with any M151.



Half-Mast

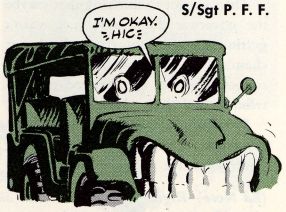


Dear Half-Mast,

When checking the vacuum portion of the fuel pump on our M37, M38 and M38A1 wheeled vehicles, we find oil in the cup-like bottom cover.

Does this oil affect the operation of the pump, engine or wipers?

S/Sgt P. F. F.



Dear Sergeant P. F. F.,

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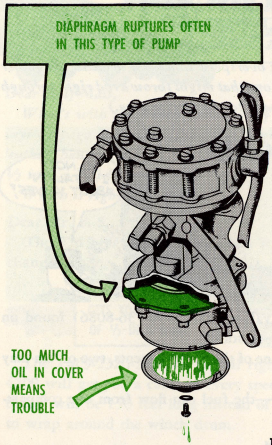


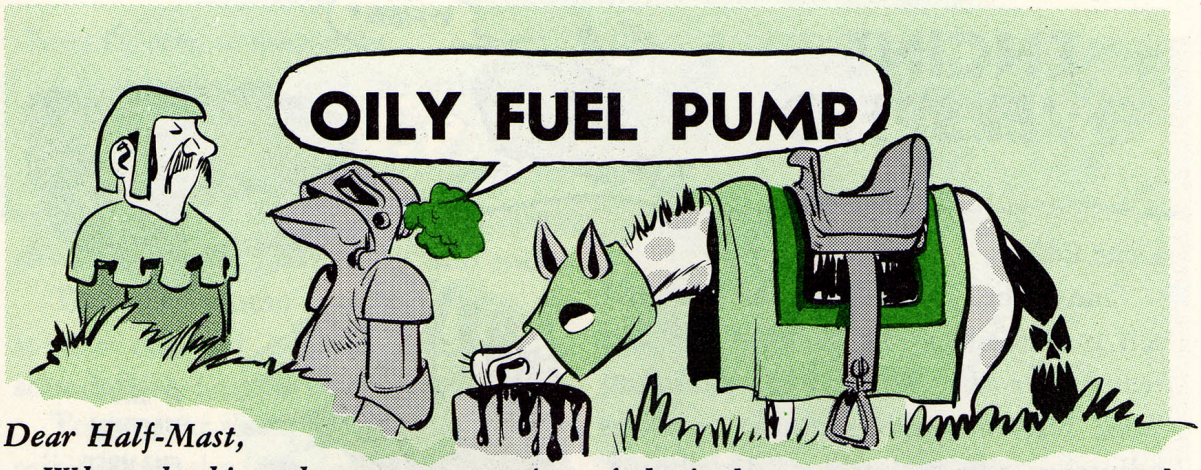
When the engine performs OK and the windshield wipers do their job, don't worry about the oil in the vacuum section of the fuel pump.

If your engine suddenly starts gulping oil, have your vacuum pump checked out before you go digging for other possible causes.

The diaphragm ruptures real often in this type of pump. When that happens, oil is drawn from the crankcase and pumped straight into the intake manifold.

Symptoms will be fouled spark plugs, rough idling, blue smoke from the exhaust, too much oil consumption and a lazy windshield wiper.

Half-Mast



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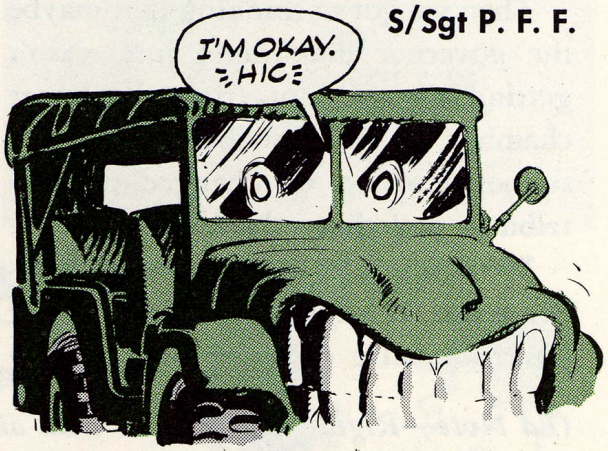

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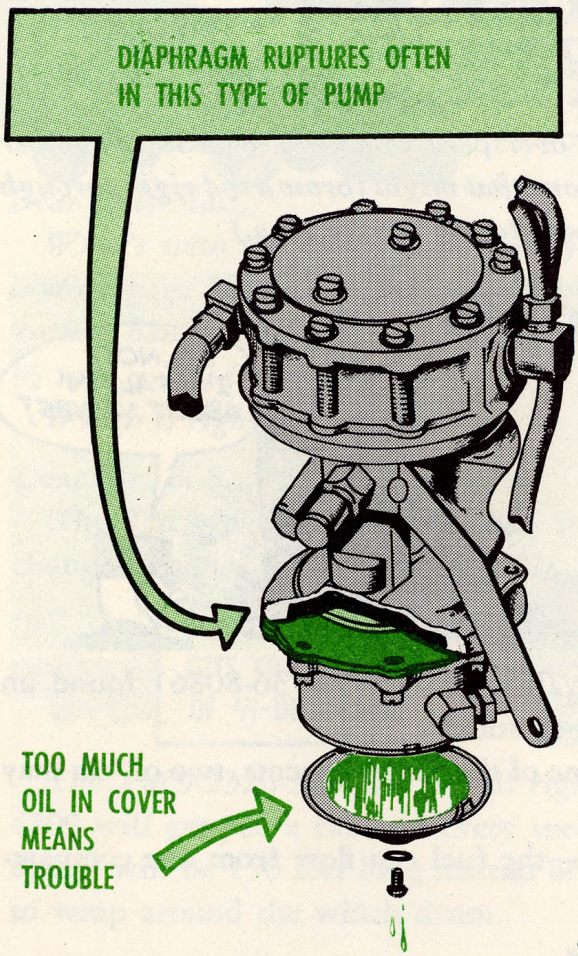

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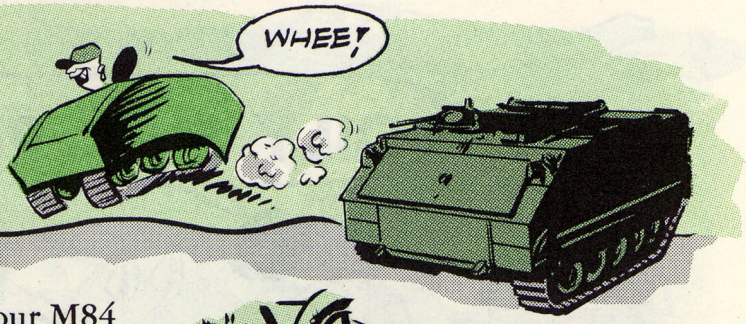
Half-Mast

ENGINE OVERSPEED

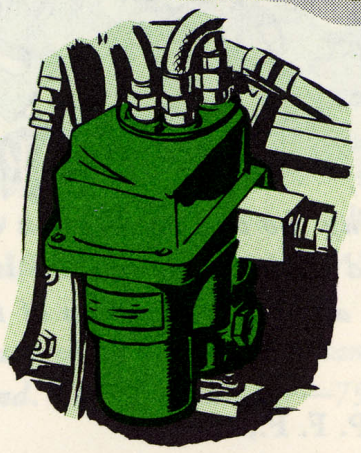


Dear Editor,

One of the GMC engines on our M84 self-propelled mortar blew its top and went over the 3400-RPM maximum limit. Had us running around in circles adjusting the carburetor, distributor, and checking the governor diaphragm. None of this did any good.

Then we got to thinking that maybe the governor diaphragm just wasn't getting the vacuum from the lower chamber of the distributor, like it's supposed to. So we changed the distributor and that solved the problem.

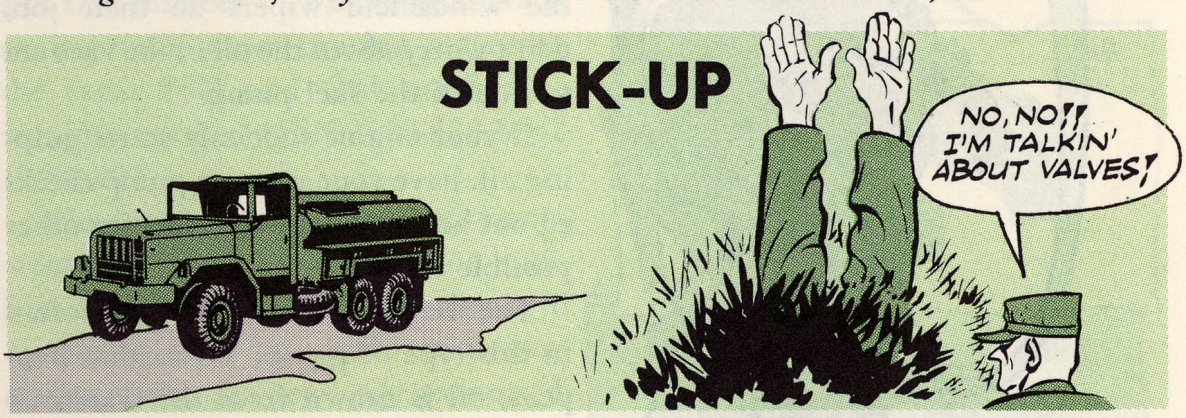
We don't quite know why the chamber failed. It might have been a faulty governor valve or leaky seals. At any rate, now when we get an overspeed, we usually save a lot of time and elbow grease by checking the distributor first.



A SHOT VACUUM CHAMBER IN THE DISTRIBUTOR CAN LET GOVERNOR OVERSPEED

Crew
NYARNG
Camp Drum, N. Y.

(Ed Note—Right! And drivers with an overspeed condition want to remember they don't have a "hot" vehicle . . . just one that might throw a rod right through the engine block if they don't nurse it back to the service area.)



Is corrosion causing the discharge valves (FSN 2590-736-8086) found on your M49 and M49C gasoline tankers to stick?

So now when you wanta dump but one of the compartments, two of 'em may get dumped before you spot the thief.

This'll happen when the valves stick—the fuel can flow from one compartment into another.

Here's the poop on those valves:

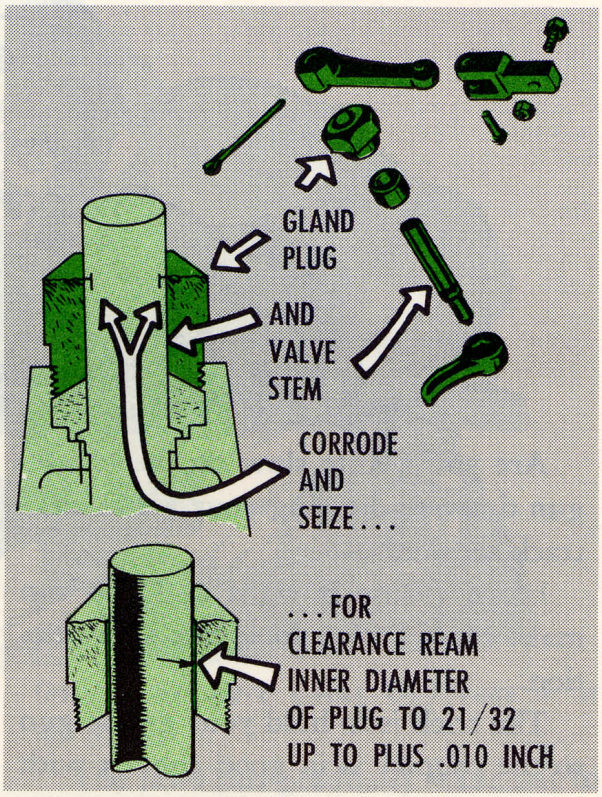
The gland plug and the valve stem corrode and seize.

When the lever is pulled to open the valve, the plug turns with the stem, threads into the valve body, and sticks.

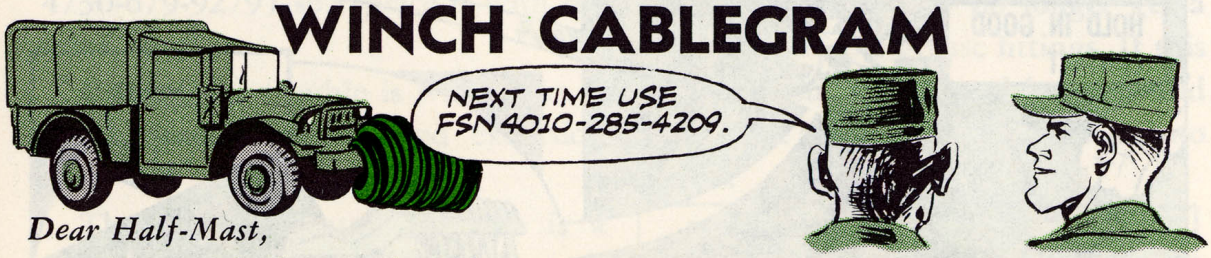
The seal doesn't close when the lever's released because the stem is seized. This lets the fuels flow.

To prevent that plug and stem from seizing, put the plug in a vise and ream its ID to 21/32 up to plus .010 inch. Don't forget to remove any rust that might be on the stem. With the added clearance and a clean stem, you'll get no more sticking discharge valves.

One more thing. Best get your CO's permission before doing this job.



WINCH CABLEGRAM



Dear Half-Mast,

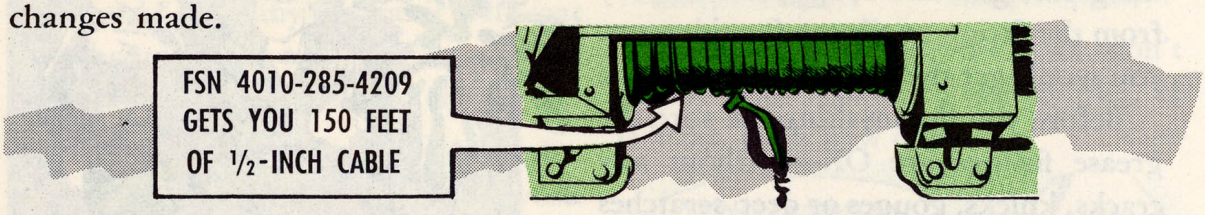
What's with the winch cable on my M37 ¾-ton truck? TM 9-8030 (May 55) says on page 288, para 180b, that the cable size is 7/16 inch by 150 feet. On 'tuther hand, TM 9-2320-212-20P (Feb 60) page 78, Item 3, says the cable is ½ inch x 200 feet.

Which is right?

CWO F. S.

Dear Mr. F. S.,

The TM 9-8030 was right when it was issued, but there have been some changes made.



The TM 9-2320-212-20P is still right except for one detail. FSN 4010-285-4209 will get you a cable in every specification like it says in the -20P except that it will be 150 feet long instead of 200. That extra 50 feet was too much to wrap around the winch drum.

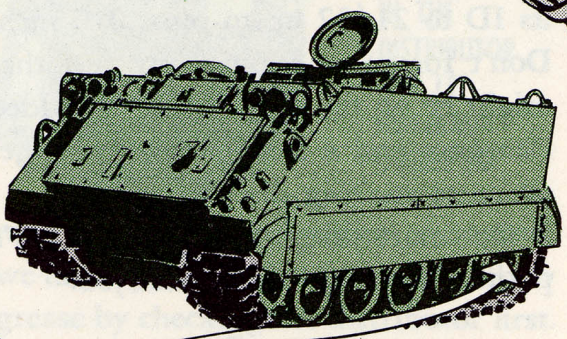
Half-Mast

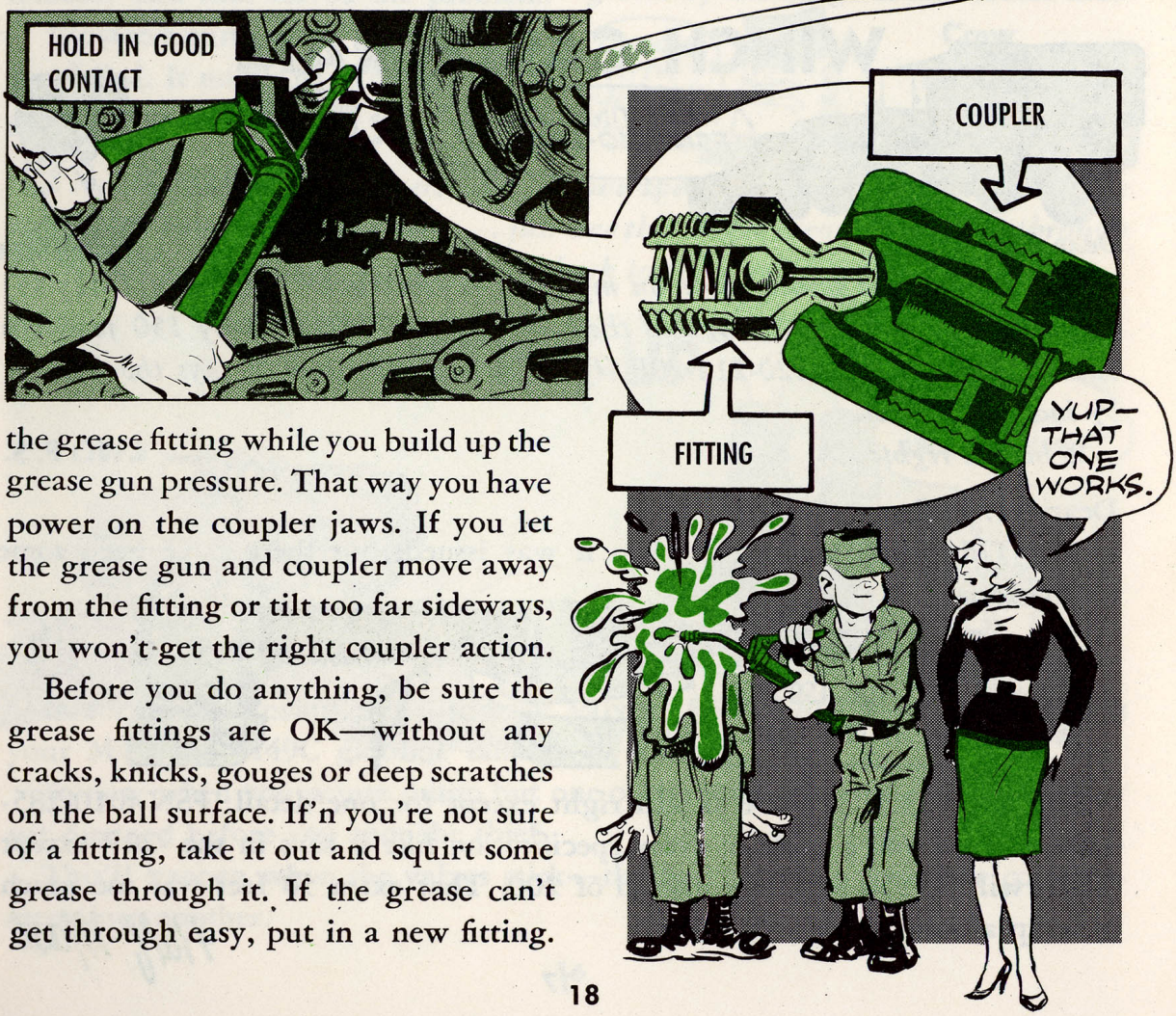
QUICK DRAW

Are you a mite slow on the grease-gun draw—adjusting your M113 PC's track tension?

Learn to use it right and you can make Matt Dillon look like slow motion.

The trick is to hold your grease gun so the coupler is in good contact with





the grease fitting while you build up the grease gun pressure. That way you have power on the coupler jaws. If you let the grease gun and coupler move away from the fitting or tilt too far sideways, you won't get the right coupler action.

Before you do anything, be sure the grease fittings are OK—without any cracks, knicks, gouges or deep scratches on the ball surface. If'n you're not sure of a fitting, take it out and squirt some grease through it. If the grease can't get through easy, put in a new fitting.

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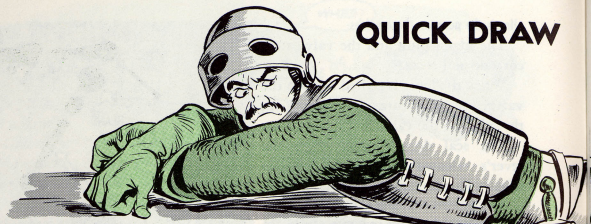

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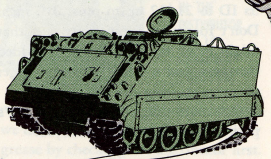

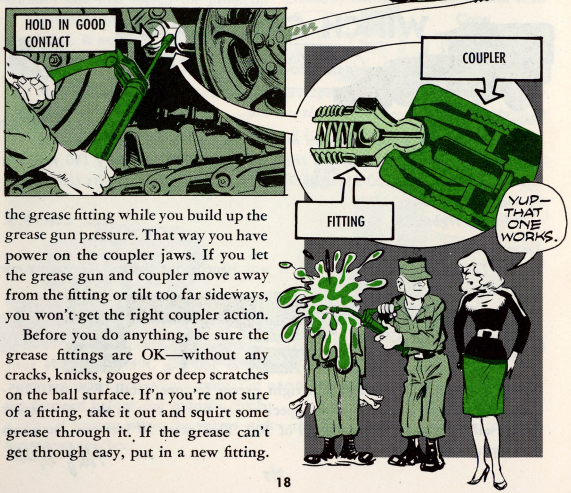

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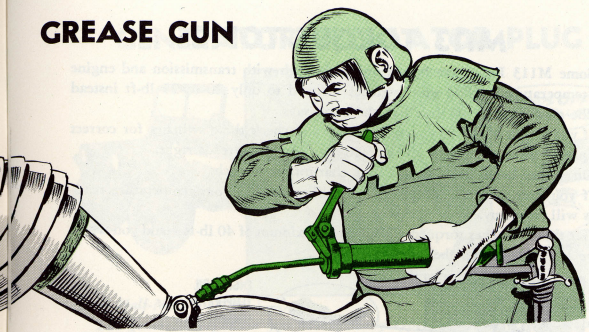
GREASE GUN



Remember . . . the fitting on the M113's track tension adjuster is a special double check-valve deal (FSN 4730-679-9279) so replace it with the same kind!

Most of the trouble is with leaks at the hydraulic coupler and extension tube.

The likeliest reason for this is a grease fitting that's damaged, plugged, or otherwise beat up.

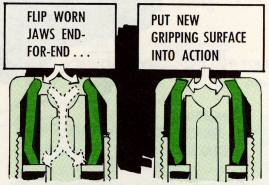
So-o-o-o, first be sure all the grease fittings you have to work on are good, then have the company mechanic check out your grease gun.

If there is a leak at the extension tube, your company mechanic will coat the threads with a sealing compound and tighten it up good and tight.

If the threads are distorted or slightly burred, first thing he'll do is work 'em over with a ⅛"-27 NPTF die.

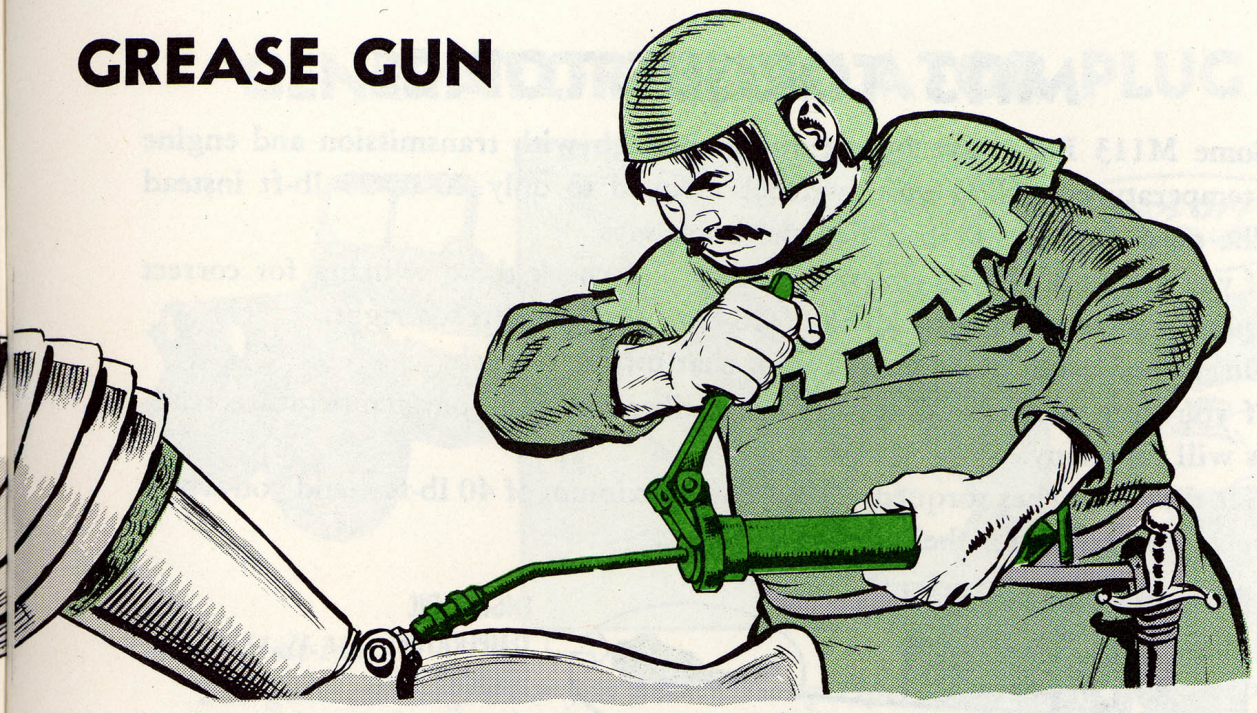
Should there be a leak at the hydraulic coupler, the best deal is to order another coupler (FSN 4930-387-9491). SM 10-2 (May 61) lists it at 45 cents.

The jaws can gradually wear out to the point where they no longer get a good grip on the grease fittings. If this happens, turn 'em end-for-end and that'll put a new gripping surface into action.



Aside from turning the jaws, don't bother with repairs to the coupler. If it leaks, get a new one.

GREASE GUN



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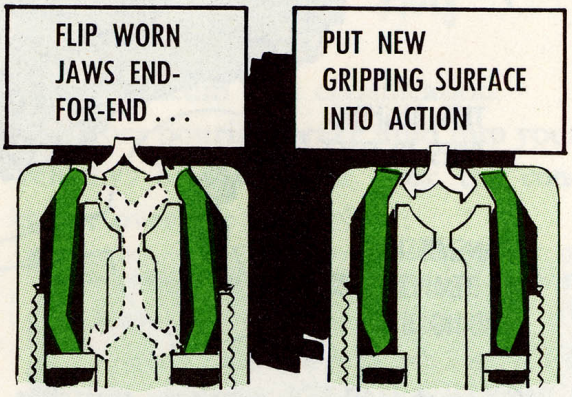

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M113 TORQUE TOPICS

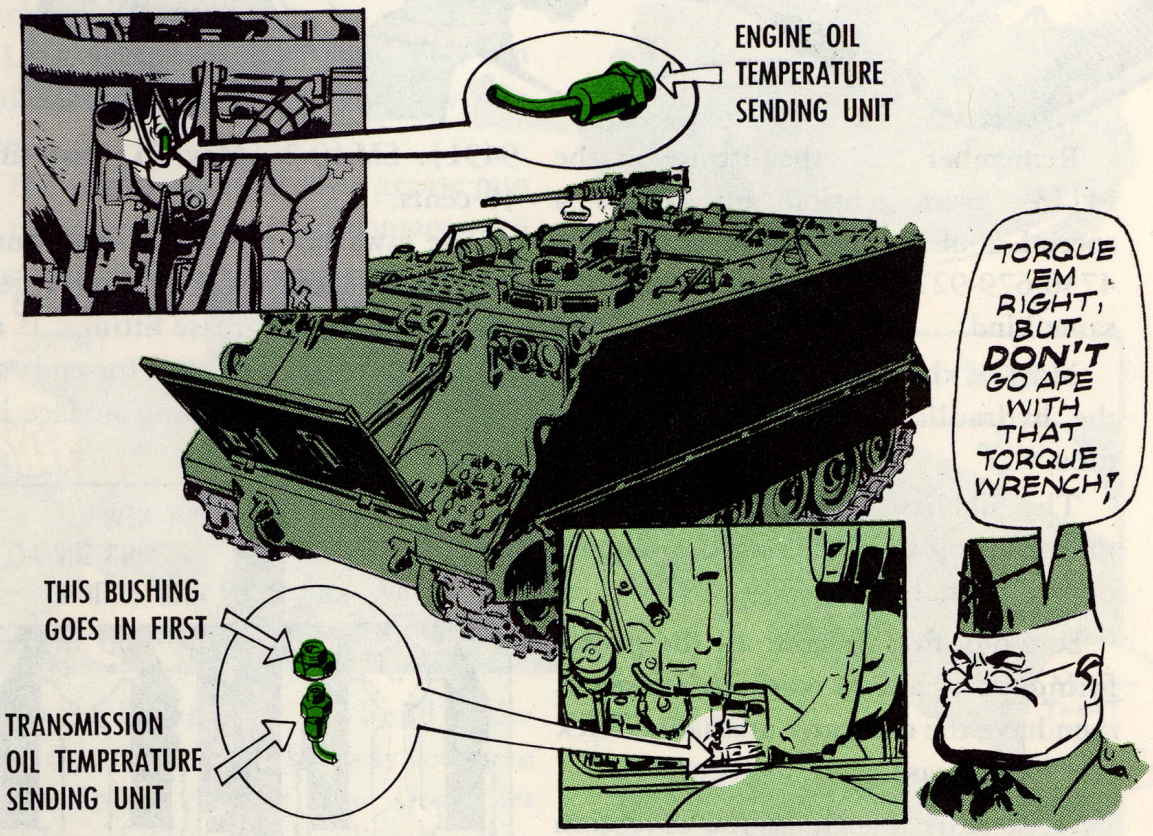
Some M113 PC's have been coming through with transmission and engine oil temperature sending unit switches torqued to only 20 to 25 lb-ft instead of the maximum of 40 lb-ft like the book says.

If you got an M113, do yourself a favor and check these switches for correct torque. It takes more than 20 to 25 lb-ft to seal the threads right.

On 'tuther hand, don't go ape with that torque wrench.

If you over-torque it'll mess up the calibration and your temperature readings will be phony.

Get those switches torqued right—to a maximum of 40 lb-ft—and you won't have any worry about them deforming.

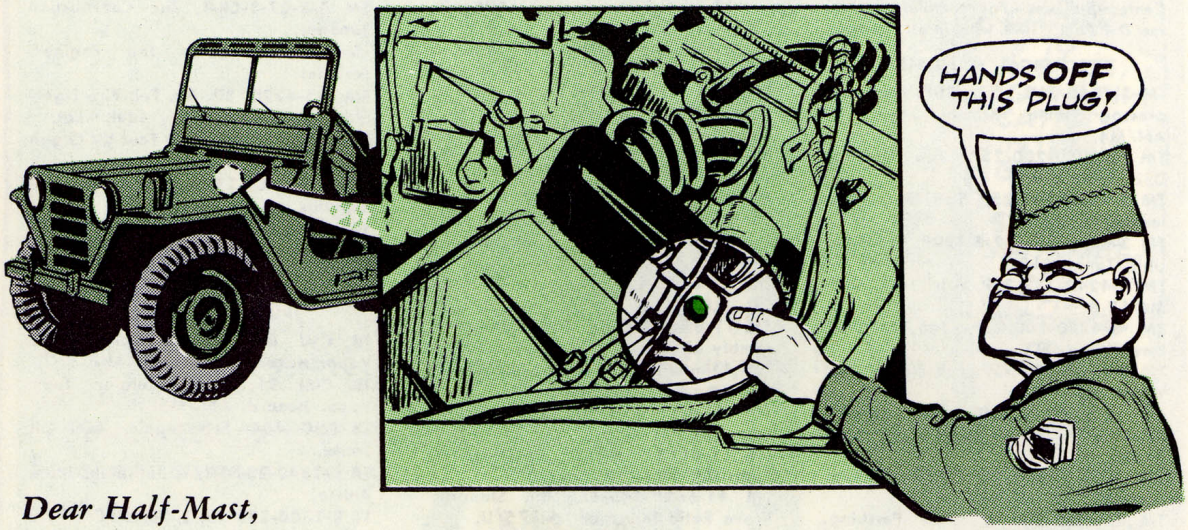


One other thing on these switches before we switch off . . . if you need to order the Transmitter, Temperature, Electrical Resistance: transmission oil temperature (9098177) you'll find it as Item 8, page 93 of TM 9-2300-224-20P (Nov 61) and the stock number is FSN 5930-679-9286.

Just remember, whenever you order one you should also order Bushing Pipe: shoulder, M1, glvd, ¾ NPT x ½ NPT (144042). It's Item 9 on page 93 of the -20P and the stock number is FSN 4730-277-2164.

The bushing and the transmitter belong together like Connie and maintenance-minded soldiers.

GENERATOR REGULATOR PLUG



Dear Half-Mast,

The generator regulator you find in many types of military vehicles has a pipe plug. What I want to know is how do you use this in maintenance?

Sgt J. R. K.

Dear Sergeant J. R. K.,

This is strictly a KYCPHOI item—Keep Your Cotton Picking Hands Off It.

The only time it's used is during manufacture. At the factory they run a vacuum test to be sure the regulators are sealed right. That's the only function of the plug.

Leave it be!!

Half-Mast

OLD STALE TALE

Everyone knows this is as old as the one about the farmer's daughter but it seems like it needs rehashing.

Some jokers still slip up and use petroleum base hydraulic fluid in their wheeled vehicle's hydraulic brake systems. Stop! Cease! Desist!

Only non-petroleum base fluid is to be used. To keep from doing damage to the vehicle's brake system use only, repeat, use only non-petroleum base hydraulic fluid.

You can always tell when you have the correct fluid; the containers are painted olive drab and are clearly marked with specifications, FSN and non-petroleum base classification.

Before pouring brake fluid into your vehicle's brake system, look the container over for these clues:

1. It must have this spec marking—Hydraulic Fluid, Non-Petroleum Base, Federal Specification VV-F-451A or VV-H-910.
2. It must have one of these FSN's—
   FSN 9150-190-0932 on the 1-pt size
   FSN 9150-190-0933 on the 1-qt size
   FSN 9150-231-9071 on the 1-gal size.

So, look for the tell-tale markings before you pour; this'll keep the joke from being on you.

A selected list of recent publications of interest to Organizational Maintenance Personnel. This is a list compiled from recent Adjutant General's Distribution Center Bulletins. For complete details see DA Pam 310-4 with latest changes.

TECHNICAL MANUALS

TM 3-1040-210-12 & -20P, Feb Compressor, Flame Thrower 3½ CFM, AN/M4.
TM 3-3950-200-25P, Feb Hoisting Unit, Tripod, M1.
TM 3-4240-204-25P, Feb Mask, Protective, M9-M9A1.
TM 3-4240-216-12 & -20P, Feb Filter Unit, Tank, M13.
TM 3-4240-238-25P, Feb Mask, CBR, M6-12-8.
TM 3-4730-200-25P, Jan Adapter, Line Filling, M1.
TM 3-4940-200-25P, Feb Mechanism, Valve, M1.
TM 5-3431-202-20, Feb Welding Machine Arc, Hobart Model GHB 3183S
TM 5-3431-204-20P, Jan Welding Machine, Arc, Hobart.
TM 5-4935-200-12, Feb Pershing, Ground Handling.
TM 5-4940-206-12, Feb Nike, Vehicles, Redstone, Corporal & Pershing.
TM 5-4940-212-12, Feb Redstone and Nike-Herc, Vehicles.
TM 5-6115-272-15, Feb Generator Set, 0.5 KW, Winpower Model G-0536AS-1A08.
TM 5-6115-299-10, Feb Pershing, Generating Equip.
TM 5-6675-231-25P, Feb Theodolite, Wild-Heerbrugg Model T-3.
TM 9-1005-223-12, Jan M14 Rifle.
TM 9-1220-221-20/2, Jan Computer, Gun Directions, M18.
TM 9-1290-326-12, Feb Reproducer, AN/GSQ-64.
TM 9-1290-326-20, Feb Reproducer, Signal Data AN/GSQ-64.
TM 9-1400-350-12, Feb Redstone, Operation & Maint.
TM 9-1430-250-12P/4/2, Jan Nike-Herc, Ground.
TM 9-1440-500-12P/1, Feb Hawk, Ground Handling, Equip.
TM 9-2300-223-34P, Feb Tank, Automotive, Materiel.
TM 9-2330-210-24P, Jan Chassis, Semitrailer: M117, Van: Shop, M508C.
TM 9-4931-204-12 & -20P, Feb Test Set, AN/GSM-70.
TM 9-4935-202-20P, Jan Sergeant, Test Equip.
TM 10-1105, Jan Testing Petroleum Products.
TM 10-1670-219-23P, Feb Parachute, Personnel, (Maneuverable).
TM 10-1670-226-23P, Feb Parachute, Cargo, Type RCAT.
TM 10-3930-227-10, Feb Truck, Lift, 5,000 Pound Model MHE 117.
TM 10-8415-204-23P, Feb Rocket Fuel Handlers: Clothing.
TM 11-5820-495-20P, Mar Amplifier Power Supply Group OA-3633/GRC.
TM 11-5965-206-15P, Jan Headset Microphone H-91/U-91A/U; Handset-Headset H-144/U, U-144A/U, H144B/U, H144C/U and Headset-Microphone H-210/G.
TM 11-6115-230-15, Jan Generator Set, PU-474/M.
TM 11-6140-207-12, Feb Battery Assembly BB-426/U.
TM 11-6625-345-12, Jan Calibrator Set, Frequency AN/URM-18A.
TM 11-6625-419-15, Jan Oscilloscope OS-72/U.
TM 11-6625-539-20P, Jan Test Set, Transistor TS-1836/U.
TM 11-6625-545-15, Jan Standing Wave Ratio Indicator IM-175/U.

LUBRICATION ORDERS

LO 3-1040-210-12, Feb Compressor, Flamethrower 3½ CFM, AN/M4.
LO 5-3820-205-20/1-2, Feb Crusher, Eagle Crusher Model 5230B.
LO 5-3820-205-20/2-2, Feb Crusher, Eagle Crusher Model 5157.
LO 5-4310-225-15, Jan Compressor, Schramm Model NWE-60.
LO 9-2320-211-12, Feb Truck, Chassis: 5-Ton G744 series.
LO 9-5060-12, Feb Corporal Ground Handling, Equip.
LO 10-3920-222-20, Dec Truck, Lift, 15,000 Pound MHE 178.

SUPPLY BULLETINS

SB 3-30-1, Jan Ammo Serviceability List.
SB 8-75-30, Feb Medical Supply Information.
SB 8-75-31 (NSTAG), Mar Medical Supply Information.
SB 9-214, Jan Truck, 5-Ton G744 series, Removal and Disposition of Defective Steering.
SB 38-150, May General Supplies.

SUPPLY MANUALS

SM 5-1-C7-8-SL-2, Jan Plumbing, Heating and Sanitation Equip.
SM 5-1-C7-16-SL-1, Jan Construction and Building Materials.
SM 5-2-C7-2-PL-1, Jan Construction Supplies.
SM 5-2-C7-4 PL-1, Jan Construction Supplies Mat. Handling Equip.
SM 5-3-C7-1-CR-1, Jan Construction Supplies.
SM 5-3-C7-1-CR-2, Jan Engines, Turbines.
SM 5-5-4220, 30, 40, Feb Fire Fighting, Rescue and Safety Equipment.
SM 9-4-4910-A86, Feb Tool Kit Organ Maint No. 2 Common.
SM 10-1-C6-18-SL, Apr General Supplies.
SM 10-1-1670, Feb Aerial Pickup Delivery and Cargo Tie-Down Equipment.

TECHNICAL BULLETINS

TB CML 83, Feb Calculator, Toxic Vapor Hazard, ABC-M2.
TB CML 91, Feb Calculator, Toxic Vapor Hazard, ABC-M3.
TB ENG 404, Feb Repairs, Fuel Oil Tanks.
TB 9-1340-204-12/1, Jan Little John, Ammo.
TB 9-2300-224-20/2, Jan APC M113.
TB 9-2320-209-40/1, Feb Chassis, Truck: 2½ Ton, G742 series and M109.
TB 9-2350-215-10/2, Jan Equip Ser Criteria for Tank, M60-M60A1.
TB 11-5815-256-10/1, Feb Serviceability Criteria Teletypewriter, Central Office AN/TGC-10.

MISCELLANEOUS

AR 711-541, C2, Jan.
AR 735-35, C2, Jan Organizational Supply.
AR 750-23, Feb Premature Removal of Installed Aircraft Engines.
DA Cir 55-18, Jan Utilization of Conex Transporters.
DA Cir 710-2, Feb Army Aircraft Inventory, Status and Flying Time Report.
DA Pam 38-750, Oct Army Equipment Record System.
DA Pam 310-1, Dec Index-Admin Pubs.
FM 6-79, Jan 105-MM How M108 SP.
MWO 9-1410-500-20/1/15, Jan Hawk, Ammo.
MWO 9-1450-500-20/11, Feb Hawk, Operation & Maint.
MWO 9-2300-224-20/11, Feb APC M113; Transfer Case Oil Level Caution Plate.

PUBLICATIONS MAGIC

Pubs in short supply?

If you don't find 'em in DA Pam 310-4, you may be able to get a manufacturer's manual, like for the Curtis Mdl CVG-907-AENG1 compressor, f'rinstance.

The manufacturer's manual for this particular compressor wears Stock No. USAMSC 7610-C-1-0853. You requisition it on DA Form 1546—just like a repair part—thru your local Engineer repair parts supply channels.

Just complete the requisition with that magic stock number and there you are.

ROAD MAP FOR FORMS

Sure! Any time you hit the road for a private trip, you get your road maps out and plan your route. That's so you can avoid detours and find the shortest way.

In the Army Equipment Record System you'll want to do the same for your DA Forms—so they don't detour but take the thruway.

Since some parts of the system are still under construction, here are some routes you'll want to note on your TAERS road map.

Your NMP copies of DA Forms 2407, (except EMERGENCY AND URGENT EIR's) 2407-1, 2408-3-1, 2408-7, and 2408-8 all get mailed down the expressway to:

COMMANDING OFFICER
RARITAN ARSENAL
ATTN: AMDPC
METUCHEN, N. J.

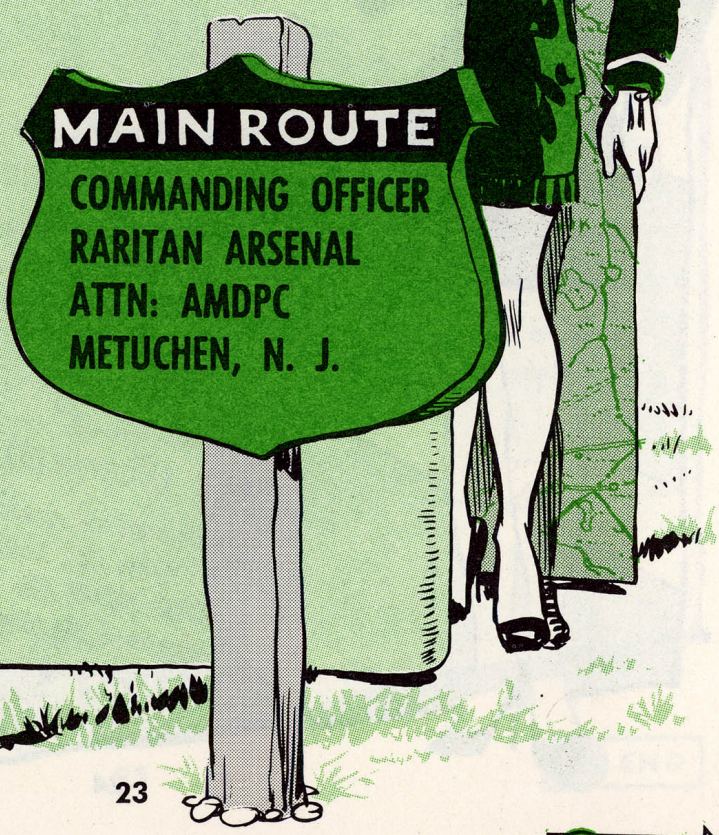
. . . instead of the addresses listed in Appendix III and IV of TM 38-750. (DA message 326748 dated 21 Jan 63 sets this up. DA message 327632 dated 30 Jan 63 added the 2408-8 to the deal.)

The* 2407 *is the Maintenance Request form, and the 2407-1 is the Maintenance Request—Continuation Sheet.

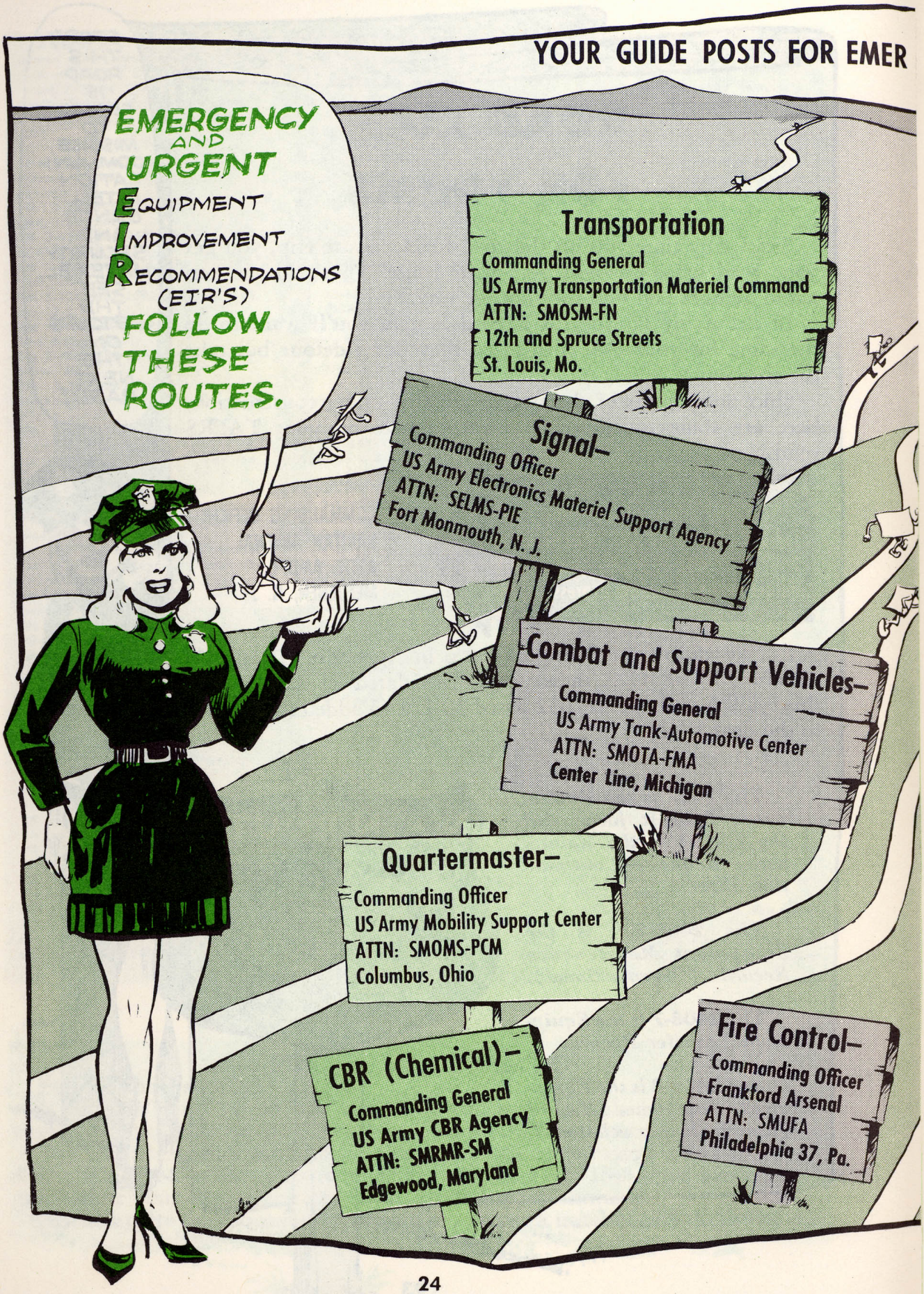
The* 2408-3-1 *is the Equipment Maintenance Record (Organizational).

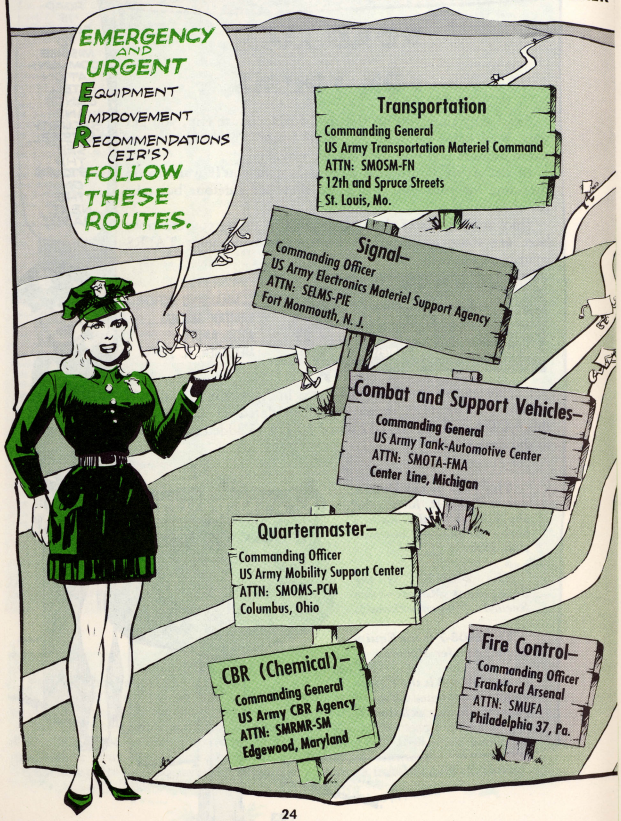
The* 2408-7 *is the Equipment Transfer Record.

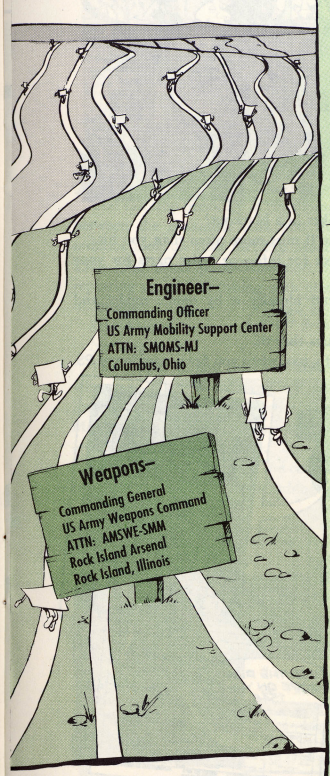
And* 2408-8 *is the Equipment Acceptance Record (used by higher echelons).



P.S. MORE


EMERGENCY AND URGENT EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR'S) FOLLOW THESE ROUTES.
Transportation
Commanding General
US Army Transportation Materiel Command
ATTN: SMOSM-FN
12th and Spruce Streets
St. Louis, Mo.
Signal–
Commanding Officer
US Army Electronics Materiel Support Agency
ATTN: SELMS-PIE
Fort Monmouth, N. J.
Combat and Support Vehicles–
Commanding General
US Army Tank-Automotive Center
ATTN: SMOTA-FMA
Center Line, Michigan
Quartermaster–
Commanding Officer
US Army Mobility Support Center
ATTN: SMOMS-PCM
Columbus, Ohio
CBR (Chemical)–
Commanding General
US Army CBR Agency
ATTN: SMRMR-SM
Edgewood, Maryland
Fire Control–
Commanding Officer
Frankford Arsenal
ATTN: SMUFA
Philadelphia 37, Pa.





DIFFERENT ROUTES

On missile materiel, you want to mail all NMP copies of DA Forms 2407, 2407-1, 2408-3-1, 2408-7, and 2408-8 straight to:

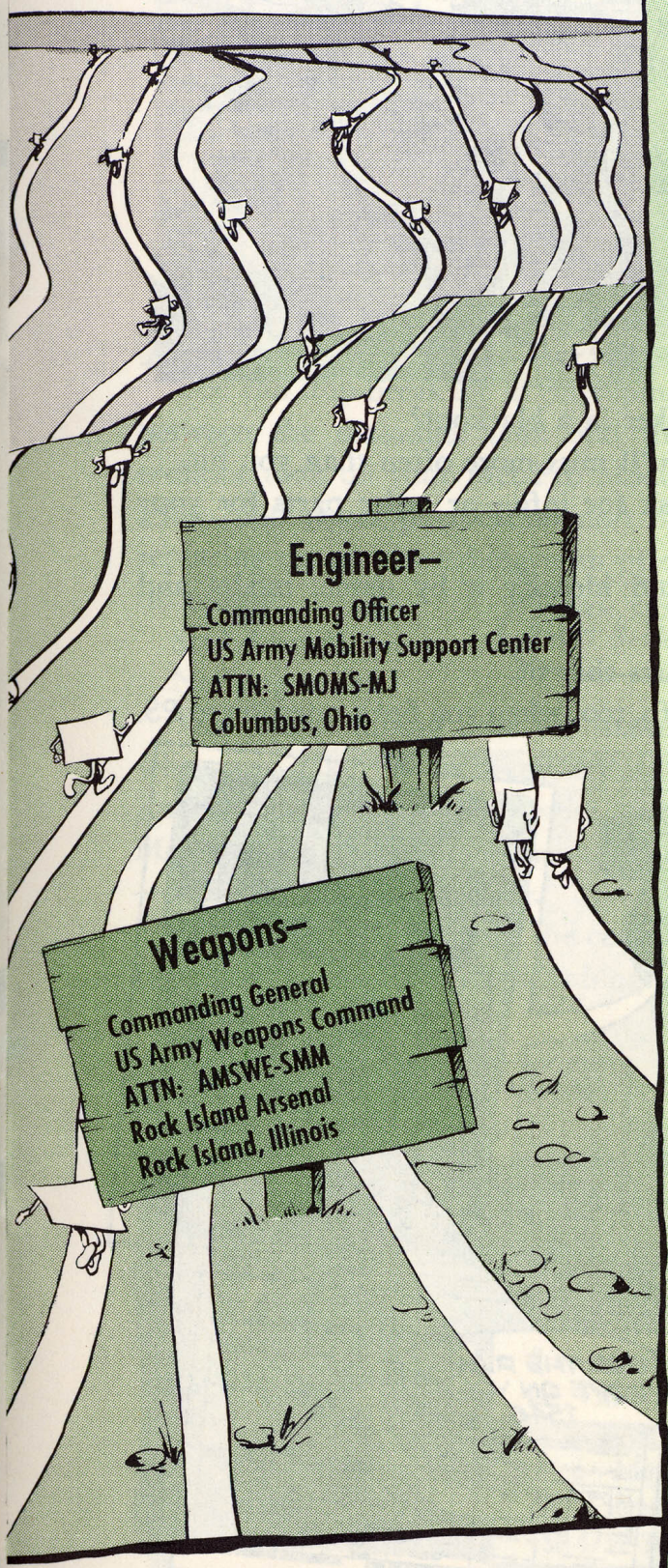
SEND TO
Commanding General
US Army Missile Command
ATTN. AMSMI-SME
Redstone Arsenal
Huntsville, Alabama

Any NMP copies of these forms that you whomp up on communications intelligence and security materiel get mailed directly to:

Commanding Officer
US Army Signal Communications Security Agency
ATTN SIGCR-4
Arlington Hall Station
Arlington 12, Va.

That first message says that Change 1 to TM 38-750 will pick up these changes to your maintenance forms road net.

END



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SEND TO

Commanding General
US Army Missile Command
ATTN. AMSMI-SME
Redstone Arsenal
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Commanding Officer
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Arlington Hall Station
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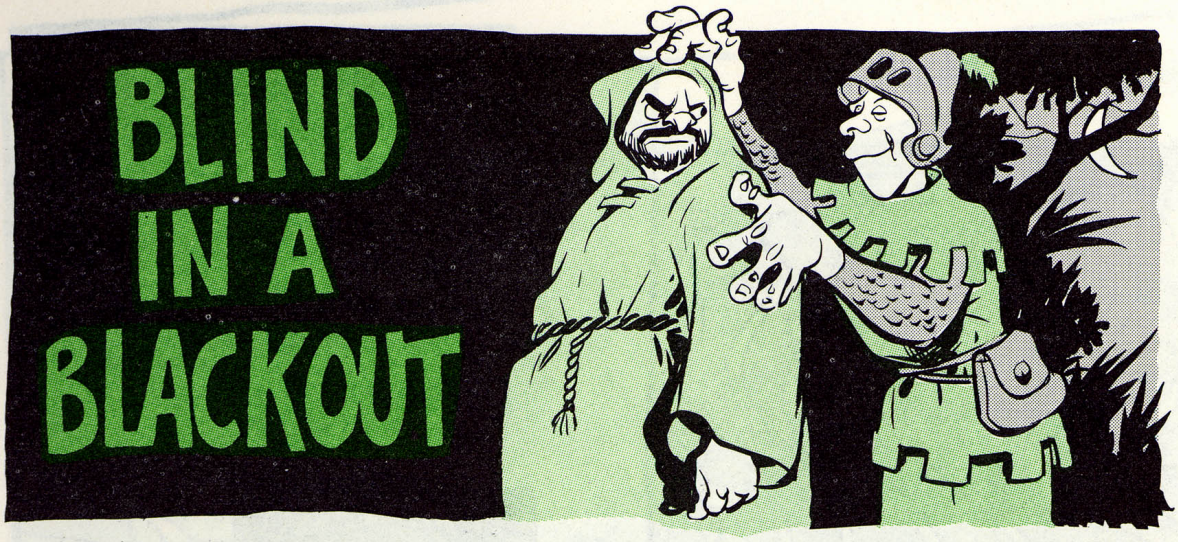
PS END



Ever try to identify a box under a blanket in a blackout?

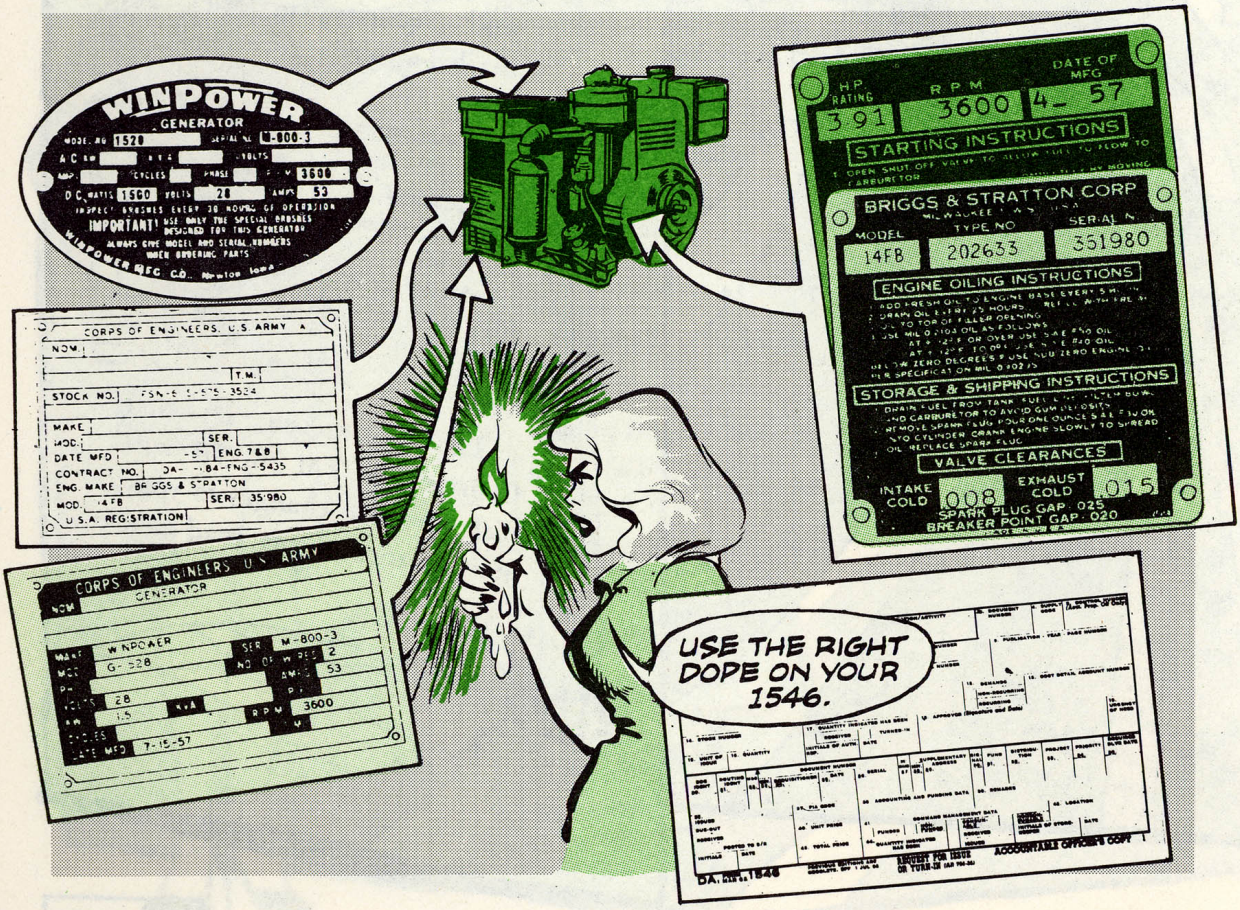
Possible, maybe, but it's a good bet you'll miss more often than you hit.

So, never play this game when you ask for info—or order parts for your equipment.

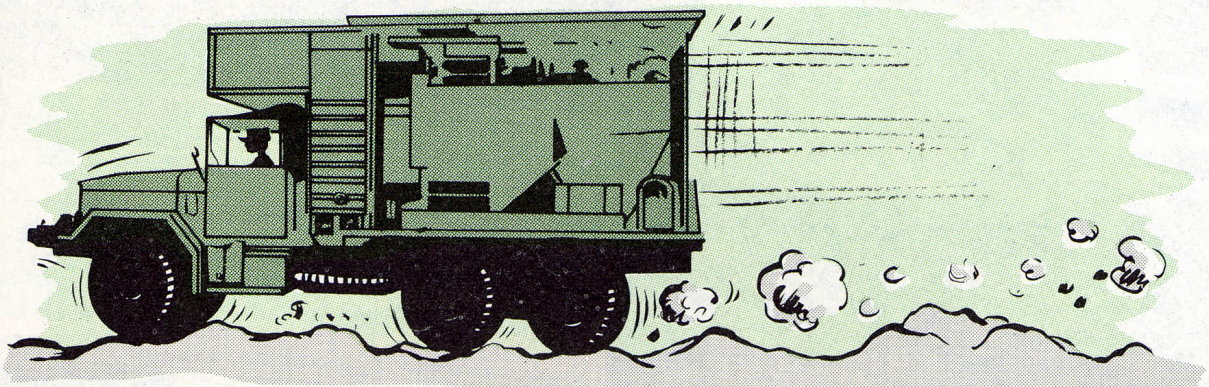
Read your equipment's data plates, and identify it by name, model and number—on your DA Form 1546.

It'll pay in faster, better info—and parts that fit.

PS—It helps if you include the same info, too, when you fire a question to PS.



LET IT SHAKE — NOT BREAK



You can stop breakage in the piping between the diatomite tank and the erdlator tank on your Met-Pro Model 1500-2600 water purification unit by replacing the copper tubing with plastic tubing.

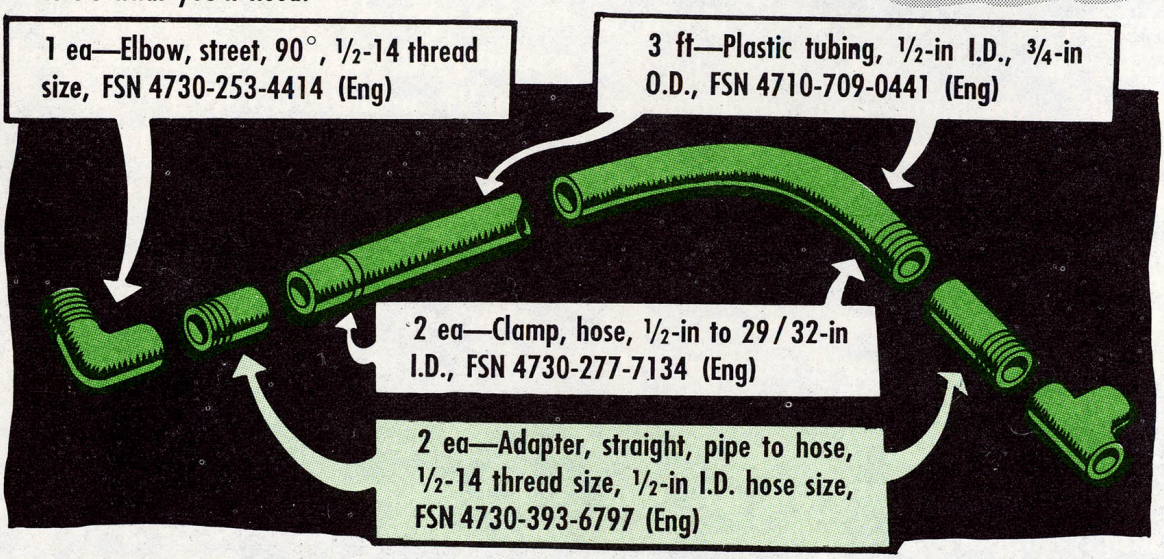
Sound simple?

Nothing to it.

The copper tubing does the shakes when you take off cross-country and jostle across rough ground with your Met-Pro outfit. Something has to give —and it's the copper tubing.

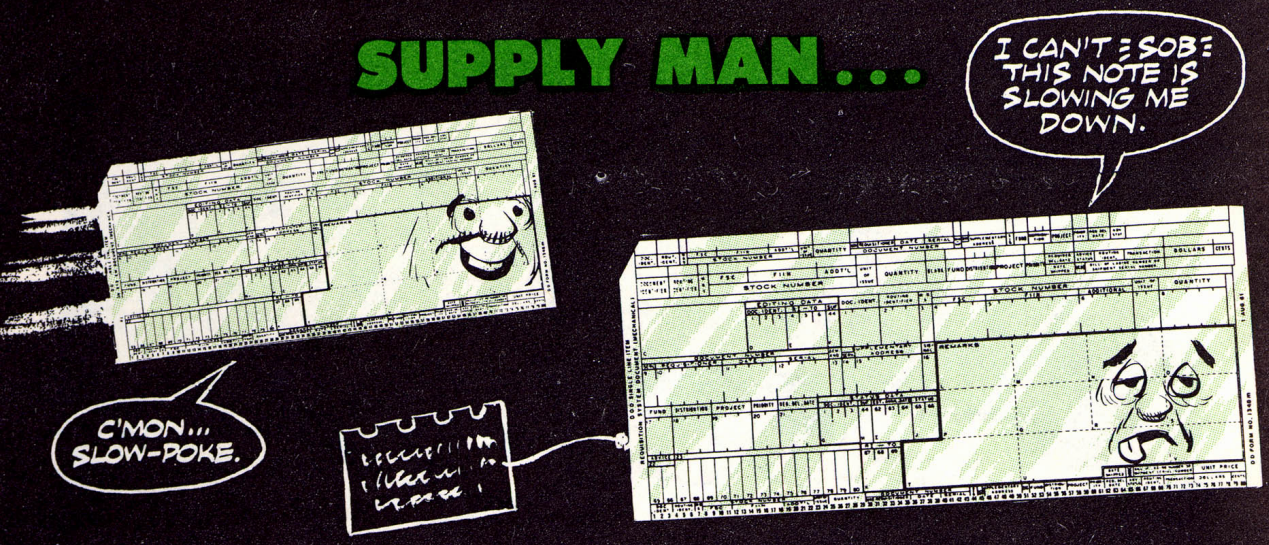
So-o-o-o . . . just replace the copper tubing with a flexible plastic tubing.

Here's what you'll need:



Now when you hit the bumps, the tubing will shake . . . but it won't break.

SUPPLY MAN . . .



Give a careful listen - - -

You say it's happened to you?

You need to order a repair part you know (for sure) doesn't have an FSN? And you only have some other part number (manufacturer's, Cml, Engr, Ord, etc.), but no manual or publication reference to quote in your requisition?

Don't give up!

Here's what you do—

Give the repair part description and whatever part number you have for it on your requisition, the way you do on all your requests. Then put a note on the requisition (attach a note if you're using the DA 1546 request form), briefly explaining your problem to your supply support outfit. (They know that AR 725-50 OK's the deal.)

Then the supply support people will make a technical edit of your request. When their edit search verifies that there is no FSN, they'll turn to MILSTRIP procedures (Military Standard Requisitioning and Issue Procedures).

Under MILSTRIP, you see, your supply support can help you with this kind of a request by using a special code, and by writing the info you give 'em in the remarks section of the DD Form 1348 (the MILSTRIP single-line item, punch-card requisition form), which they forward to their supply center.

Of course, when your request is assigned this special code (it's called the "exception code"), the sticky part is that your request'll have to be mailed in rather than sent through the swift, MILSTRIP electrical channels.

Also, the supply center receiving the request has to process it manually, because the electrical brains which can process a truck load of supply data in seconds, will accept only legitimate and normally authorized FSN'd items.

So it'll likely take a bit longer to locate and ship your repair part . . . but, you'll get it (or info on where you can get it) if the repair part's available.

However, like was said in the beginning . . . you can ask for repair parts this way but save it for when you're way up the stump—when you know that the repair part you need hasn't been assigned an FSN or a supply authority.

JOE'S DOPE

Robin and his Woods

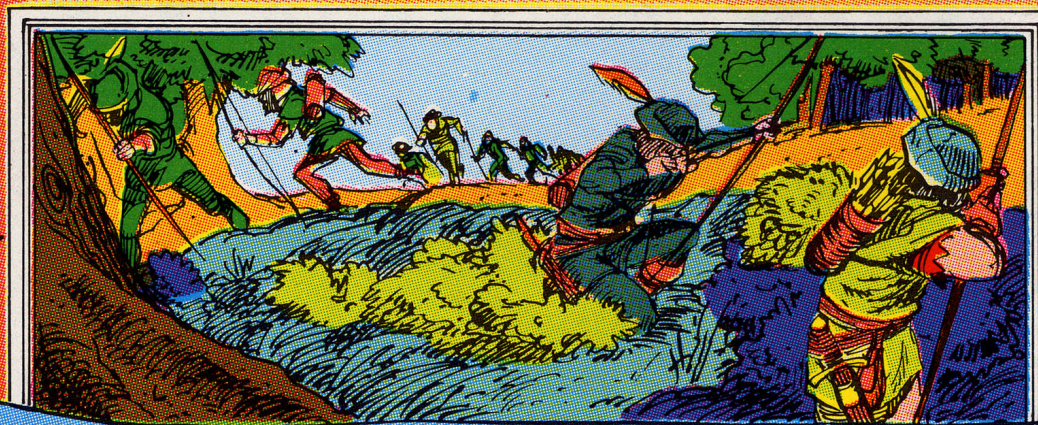
OR PM IS NEVER OUT-OF-DATE

It came to pass that Robin of Loxley and his men retired back to the deep of Sherwood Forest. They were to finally destroy the hated sheriff and free the land that has suffered sorely under his mailed fist.

But a tempest of mighty proportion scourged the land and all the lanes through the wood were lost . . . It was whispered that ghosts and demons roamed the wood, sealing it and the Nottingham castle off from the peasant folk . . . forever . . .*

*TRANSLATION FROM AN ANGLO-SAXON TALE, DATED APPROX. 800 A.D. TAKEN FROM THE WRITINGS OF RHINEHORST OF THE SILVER THROAT, BALLADEER.

Oh yeah!!! Th' real poop reads out that ol' Robin and his cool group (about company strength) pulled a combat patrol action and during this deal, lumped up ye old sheriff and Co., but good. When the smoke cleared they had zipped back, with no casualties, into prepared positions in Charlie-Bravo sector, coordinates 637579 . . . .



And that was eleven hundred years ago... So wot happened to him ?
Well, hold y'r horses, I'll clue you ... Take it easy...
COME WITH ME TODAY TO THE STILL UNDISTURBED INNER REACHES OF . . . .

SHERWOOD FOREST

The legendary abode of the Robber of the Rich . . . The Giver to the Poor . . . The Wearer of the Lincoln Green, The Master of the Long Bow and Clothyard arrow . . . the Arch Enemy of Nottingham's Sheriff . . . Robin of Loxley . . . (commonly known as)

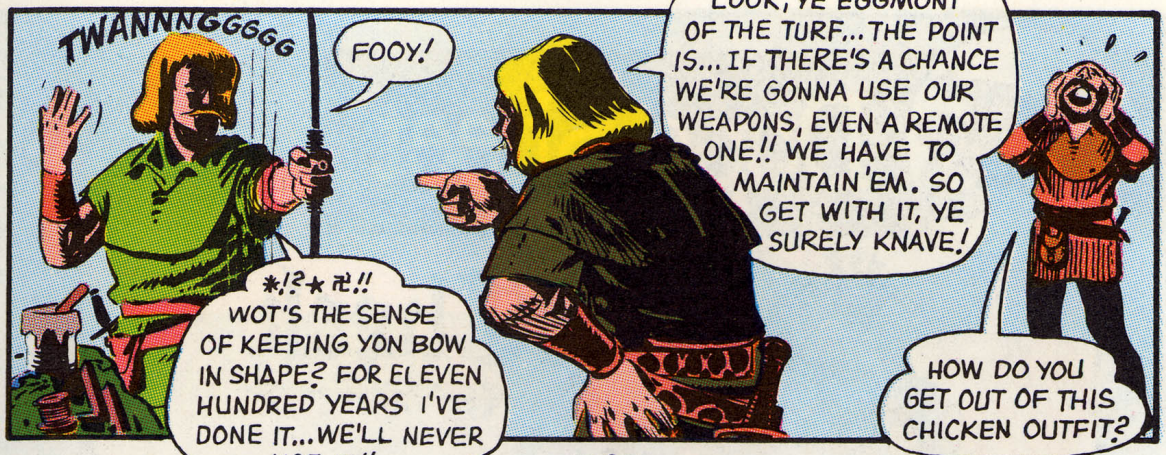
ROBIN and his Hoods

HARK! OH FEARLESS LEADER, ROBIN... WE HOODS AND THOU HAST TARRIED TOO LONG IN SHERWOOD FOREST. ALAS! EVEN THE PAST IS NOW MISTY. VERILY... WE MUST MOUNT OUR ASSAULT ON YON ACCURSED SHERIFF. WOUT SAYIST THOU?

T'IS TRUE... OH ROBIN. FOR LONG YEARS WE HAVE TOILED TO KEEP OUR WEAPONS READY FOR THE FINAL FRAY.

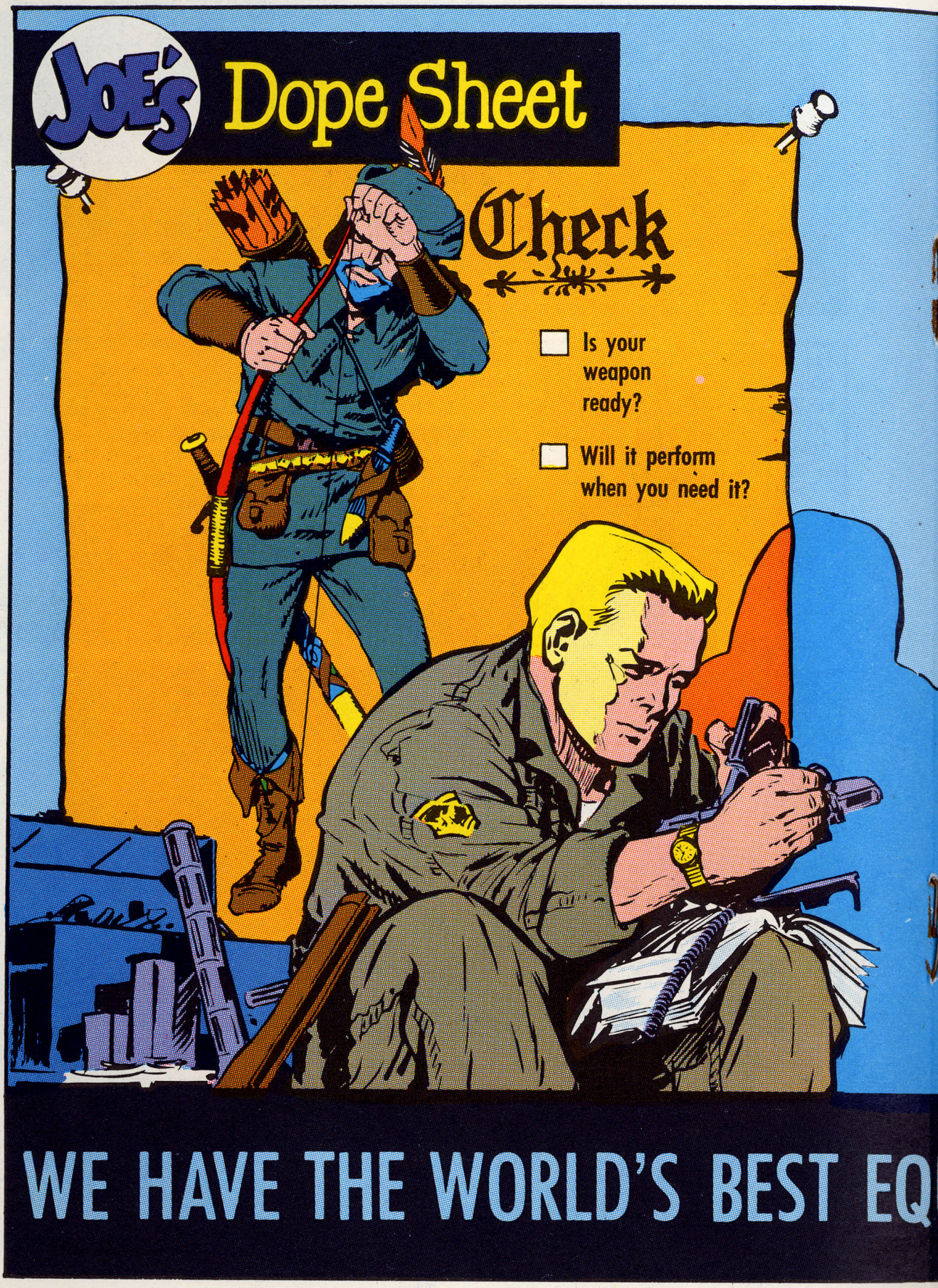
YEAH... LET'S GET THIS COTTIN' PICKIN' SHOW ON THE ROAD!

FEH! SHADDAP VARLETS... CAN'T YOU SEE I'M SUCKING HIM INTO A TRAP... HE'S JUST A BIT SLOW ON TAKING THE BAIT...

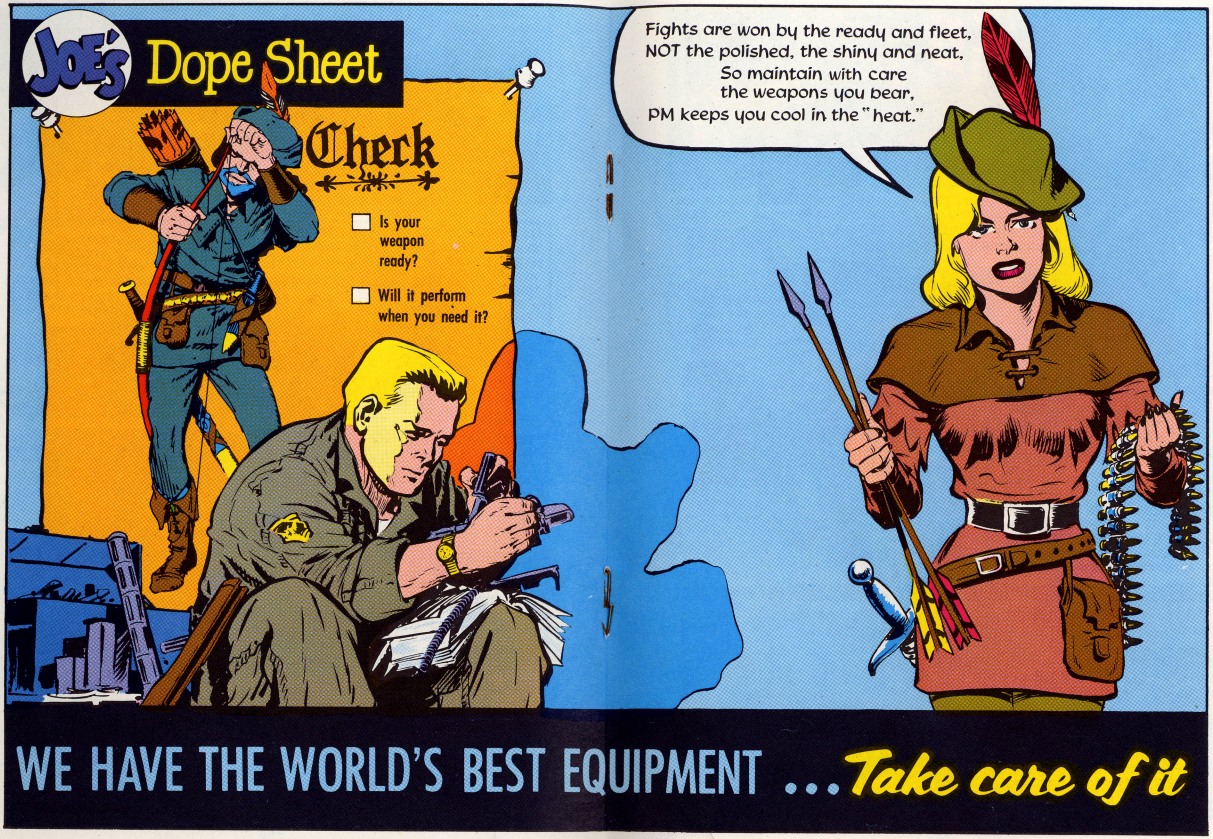

TWANNNGGGGG
FOOY!
LOOK, YE EGGMONT OF THE TURF... THE POINT IS... IF THERE'S A CHANCE WE'RE GONNA USE OUR WEAPONS, EVEN A REMOTE ONE!! WE HAVE TO MAINTAIN 'EM. SO GET WITH IT, YE SURELY KNAVE!
*!?★卍!! WOT'S THE SENSE OF KEEPING YON BOW IN SHAPE? FOR ELEVEN HUNDRED YEARS I'VE DONE IT...WE'LL NEVER USE IT!!
HOW DO YOU GET OUT OF THIS CHICKEN OUTFIT?

REMEMBER, YOU GUYS, KEEP YOUR WEAPONS, ARMOR AND HARNESS UP TO PAR...
YECH! THAT EIGHT BALL SHERIFF WILL NEVER ATTACK!
HMMMM... I WONDER WOT THAT CRUMB AND HIS BULLY BOYS OF NOTTINGHAM ARE COOKING UP?
CRACK!

NOTTINGHAM castle, deep in the moor, lying to the south of Sherwood Forest, stood dark, and foreboding. . .



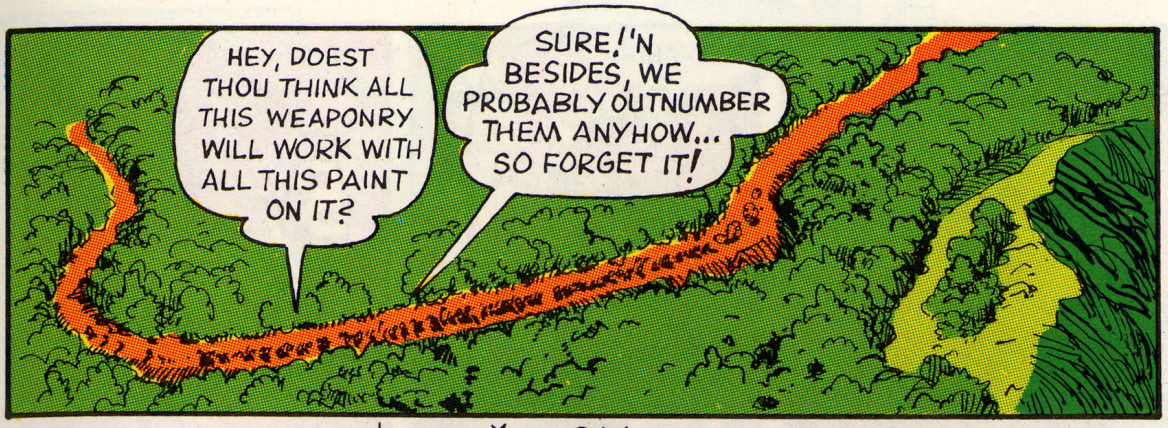
IF YOU WANT TO DISPLAY THIS CENTERPIECE ON YOUR BULL



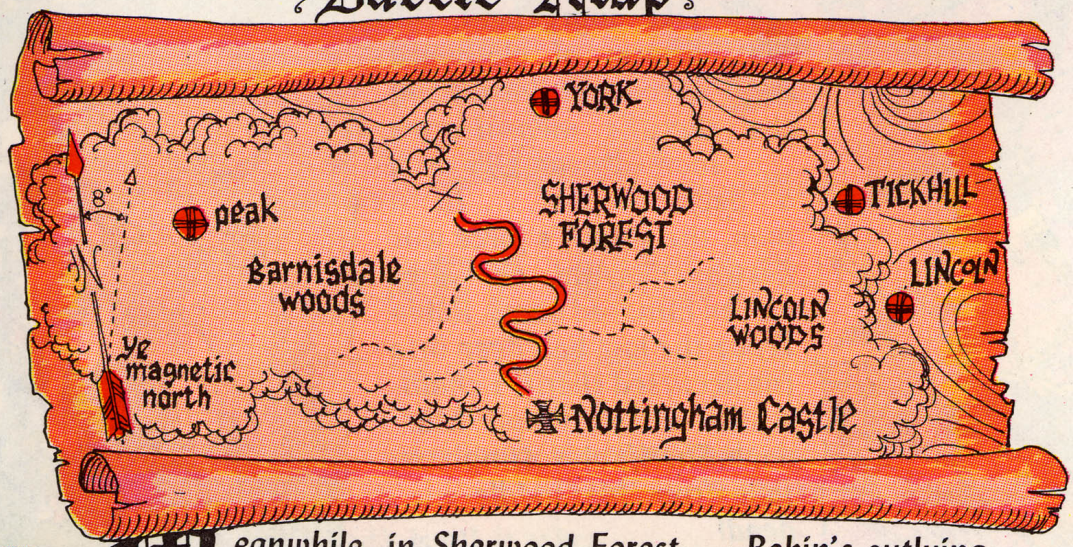
IF YOU WANT TO DISPLAY THIS CENTERPIECE ON YOUR BULLETIN BOARD, OPEN STAPLES, LIFT IT OUT AND PIN IT UP.

LETIN BOARD, OPEN STAPLES, LIFT IT OUT AND PIN IT UP.

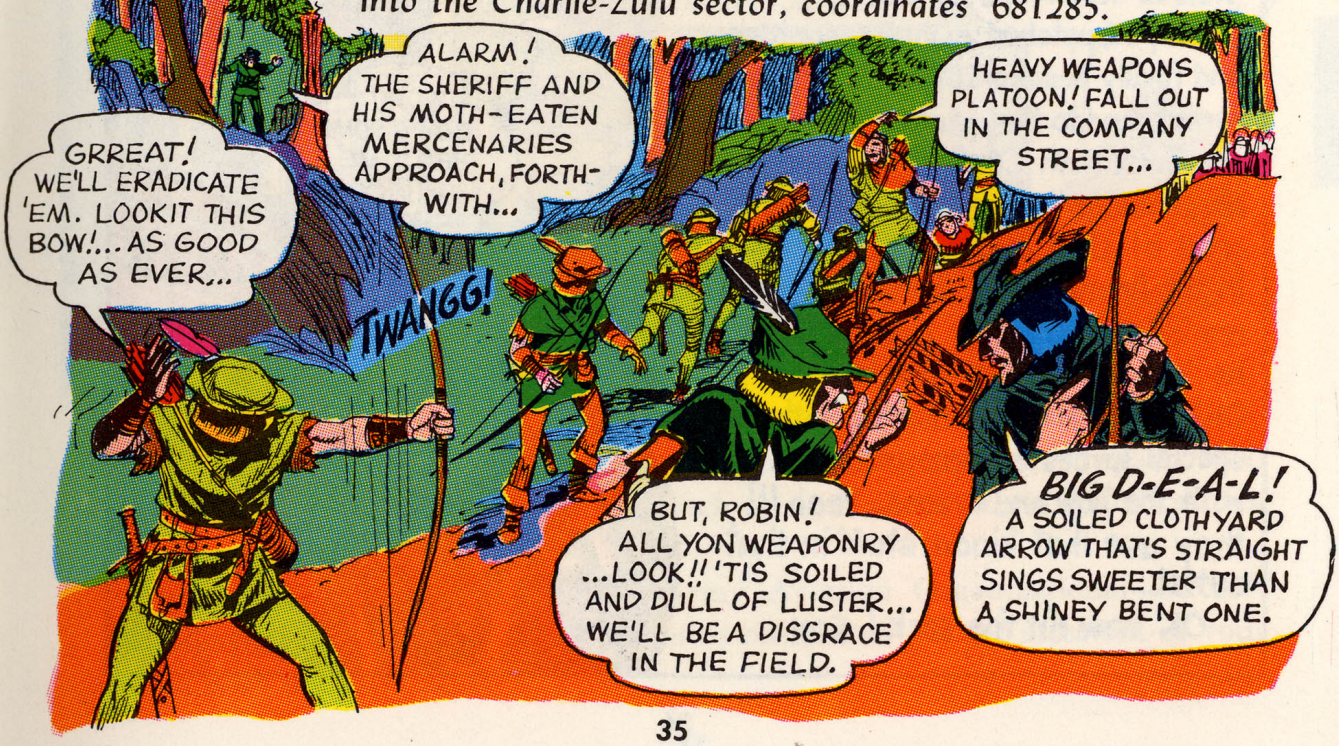
...and inside things was afoot...
IT'S ABOUT TIME...I'VE BEEN POLISHING THIS ARMOR FOR ELEVEN HUNDRED YEARS.
NOW IS THE TIME!! MEN...WE'VE TARRIED LONG ENOUGH. WE MARCH ON SHERWOOD FOREST TO DESTROY THAT FOUL ROBIN AND HIS MANGY HOODS!!
GADZOOKS! THERE'S SO MUCH PAINT ON THIS WOOD I CAN'T TELL ITS ORIGINAL SHAPE!!
HOW DOEST ONE ESCAPE FROM THIS POULTRY OUTFIT?
A GLANCE AT YOU STOUT FELLOWS GLADDENS THE HEART... LOOK HOW YOUR SHIELDS SHINE ALL YOUR LEATHER JERKINS GLISTEN! THINGS ARE AS THEY WERE... AND SO VICTORY IS OURS!!
SHADDAP STOOPID...YOU KNOW THE LORD SHERIFF GOES FOR SPIT 'N POLISH.
And so, for the first time in eleven hundred years, the portcullis raises, the drawbridge opens and the sheriff's minions pour out!!
ON TO SHERWOOD FOREST!
A POX ON ROBIN!
QUIET IN THE RANKS!
AND HIS HOODS, TOO!

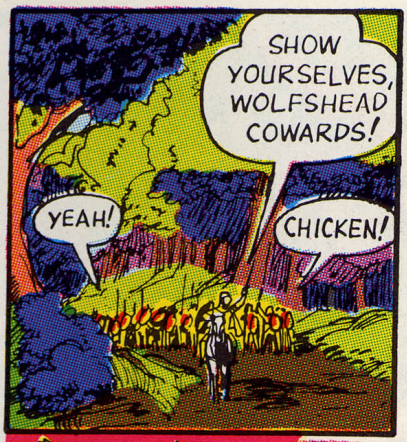


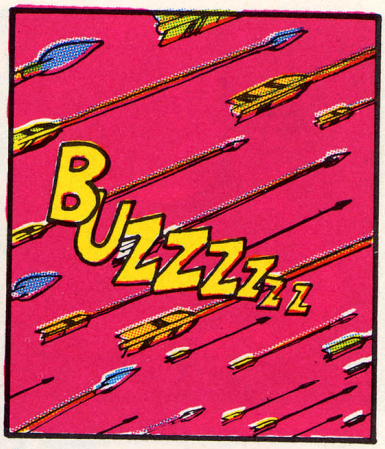
Battle Map



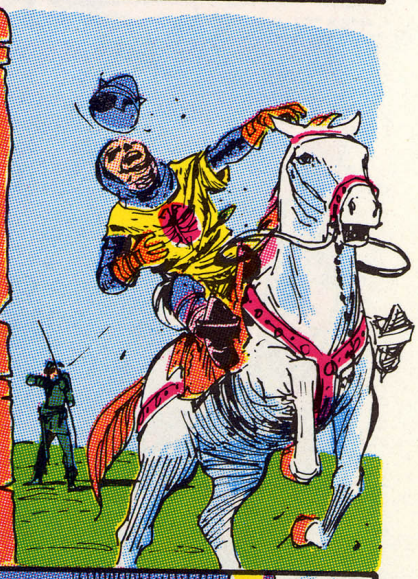
Meanwhile, in Sherwood Forest . . . Robin's outlying security has spotted the sheriff's force advancing into the Charlie-Zulu sector, coordinates 681285.





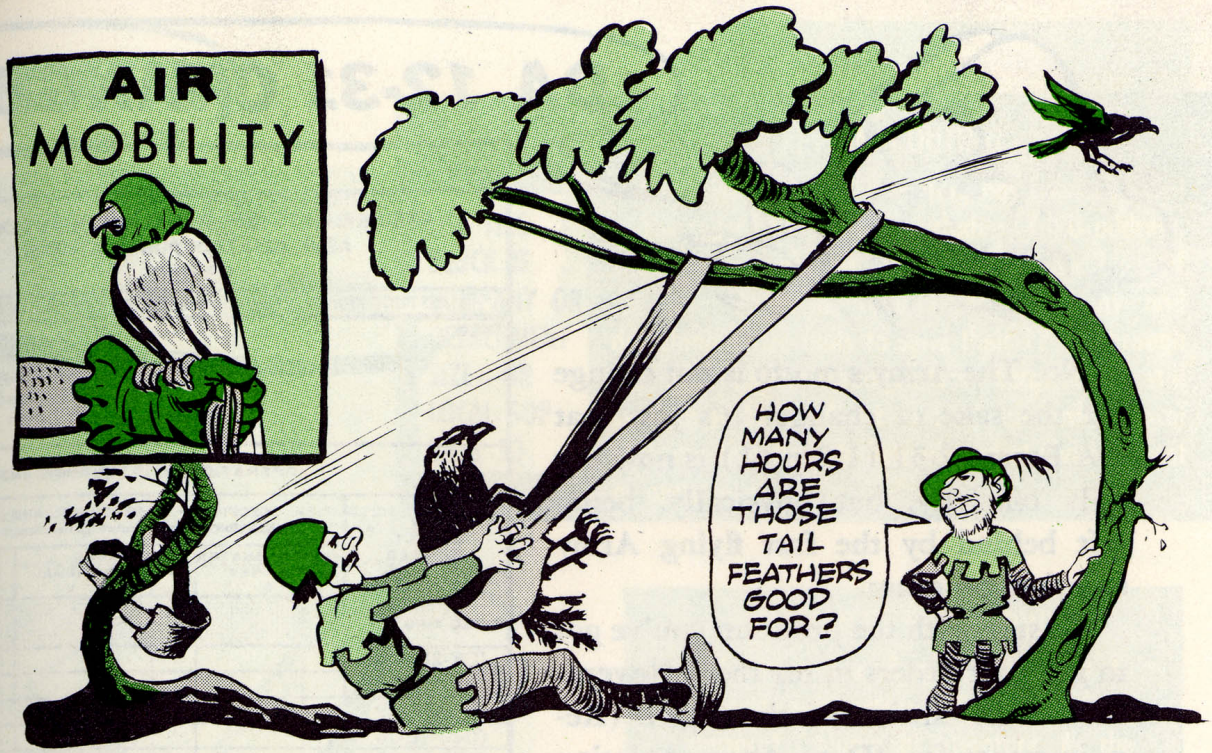


Like angry bees, the swarm of clothyard arrows strike among the sheriff's men-at-arms . . . soon all was still with a deep silence . . . to a man, the sheriff's force was destroyed! And so, after eleven hundred years, Robin drove the last bolt deep into the accursed sheriff's chain-mailed chest. Ralph Murdach, Sheriff of Nottingham, falls from his saddle . . . dead!



Well ol' Robin and his outfit, regrouped, patched up their casualties, and finally headed out of Sherwood Forest, and to their amazed eyes into the Twentieth Century!!! Being the adventurous type he headed to the good ol' U.S.A. and promptly enlisted in the Army, 'cause he said the uniforms reminded him of the Lincoln Green he "usta" wear. Where is he now? Oh! he's a P.M. instructor with the special forces on accounta he's good with the bow and arrow... Yeah!!! they use that kinda stuff in that outfit...

O.K. now hit the sack! SON.

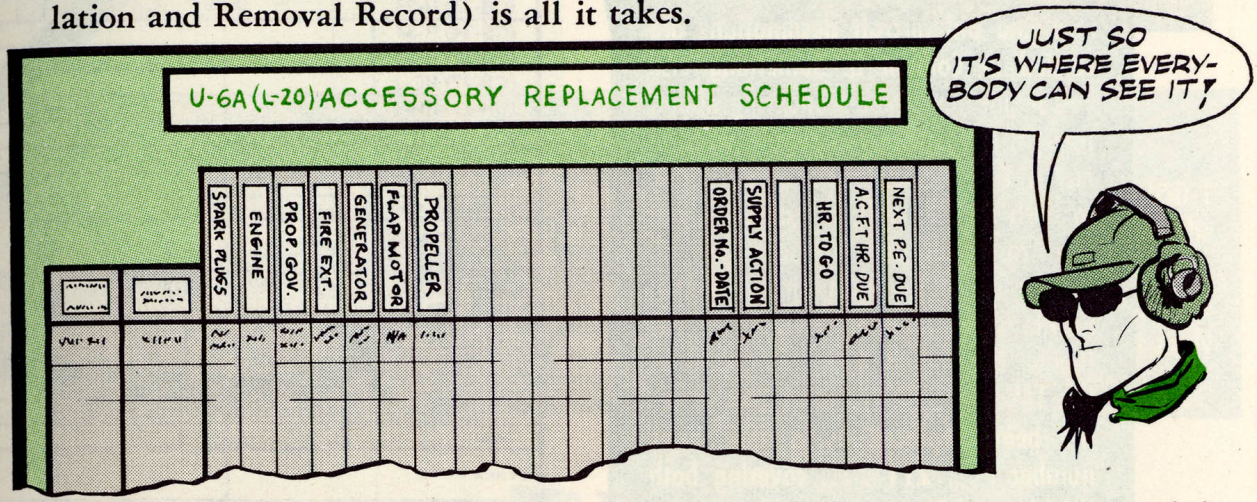


ACCESSORY REPLACEMENTS . . .

CHART AHEAD

Maybe you can't always stay on top of the supply game—but you can try.

A Chart Ahead Board helps keep your time change replacement schedules from turning into EDP statistics faster than you can close the hangar door. Just plucking the info from each aircraft's DA Form 2408-16 (Component Installation and Removal Record) is all it takes.



Any place out in the open will do, so everybody in the hangar can watch it. That way you'll be less likely to forget about ordering replacement parts until it's too late . . . and crew chiefs can watch the unit SUPPLY ACTION column when necessary.

Par 9-15 in FM 1-10 (Aug 60), "Army Aviation Organizational Aircraft Maintenance and Supply," has some hints on how to get the most out of your board with the least effort.

DA 12-31 CHANGES

No! The Army's motto is not change for the sake of change! It's just that DA Form 12-31 (1 Sep 61) is now not only officially, but physically, being left behind by the fast flying Army aviation program.

To stay with the program you've got to get your orders in for the **1 November 1962** edition of the 12-31 (Requirements for ID of Army Aviation Publications) now. Then check it against your copy of the obsolete version you've got on file with the AG Distribution Center at St. Louis.

NEW DESIGNATORS INCLUDED

You notice right off that both the new and old aircraft designations are carried in Column a. Something else you might have been wondering about, though, is whether you should write in any A, B, C etc. series designators next to each model. Well, the answer's no! The Army multi-part manuals cover all current series for each aircraft model in the same manual—except for the Hueys. But this is being corrected as the TM 55-1520-207 and 208 series are being replaced by a new series number . . . **211** . . . covering both UH-1A's and B's.

OTHER?

What's other? Well, the OTHER block at the bottom of the form means any pub of a **general** nature but **not limited** to any specific equipment, or group of equipment, or any of the lines above.

REQUIREMENTS FOR INITIAL DISTRIBUTION OF ARMY AVIATION PUBLICATIONS
(AR 310-1)

INSTRUCTIONS: THIS FORM WILL BE COMPLETED IN ACC

THRU: | TO: ...ding Offic... USA AG Publicati... 1655 Woodson Roa... St. Louis 14, Miss...

OPERATION, MAINTENANCE, INSTRUCTI...

SUBJECT COVERED a	SECTION I - OPERATIONAL AND MAINTEN... (Echelon of Maintenance Literature to Which Li...) FIRST OPERATOR AND CREW b	SECOND ORGANIZATIONAL c	THIRD FOURTH
FIXED WING			
(CV-2) AC...			
(OV-1) AO-...			
(O-1A) L-19			
(U-6) L-20			
(U-8) L-23			
U-1			
USD-1			
ALL FIXED WING			
ROTOR WING			
(OH-13) H-13			
(UH-19) H-19			
(CH-21) H-21			
(OH-23) H-23			
(CH-34) H-34			
(CH-37) H-37			
(CH-47) HC-1			
(UH-1) HU-1			
ALL ROTOR WING			
ALL FIXED WING AND ALL ROTOR WING			
FLIGHT SIMULATORS			
1CA-1			
2B-3			
2B-12			
OTHER			

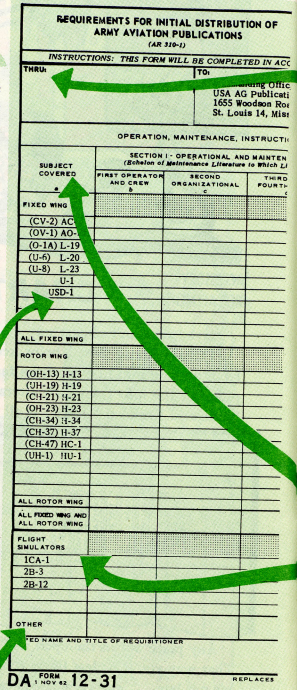
...ED NAME AND TITLE OF REQUISITIONER

DA FORM 1 NOV 62 12-31 REPLACES

DA 12-31 CHANGES AGAIN

No! The Army's motto is not change for the sake of change! It's just that DA Form 12-31 (1 Sep 61) is now not only officially, but physically, being left behind by the fast flying Army aviation program.

To stay with the program you've got to get your orders in for the **1 November 1962** edition of the 12-31 (Requirements for ID of Army Aviation Publications) now. Then check it against your copy of the obsolete version you've got on file with the AG Distribution Center at St. Louis.


REQUIREMENTS FOR INITIAL DISTRIBUTION OF ARMY AVIATION PUBLICATIONS
(AR 310-)

INSTRUCTIONS: THIS FORM WILL BE COMPLETED IN ACC

THRU:

TO:

USA AG Publicati
1655 Woodson Roa
St. Louis 14, Miss

OPERATION, MAINTENANCE, INSTRUCTI

SECTION I - OPERATIONAL AND MAINTEN
(Echelon of Maintenance Literature to Which Li

SUBJECT COVERED a	FIRST OPERATOR AND CREW b	SECOND ORGANIZATIONAL c	THIRD FOURTH c
FIXED WING			
(CV-2) AC			
(OV-1) AO-			
(O-1A) L-19			
(U-6) L-20			
(U-8) L-23			
U-1			
USD-1			
ALL FIXED WING			
ROTOR WING			
(OH-13) H-13			
(UH-19) H-19			
(CH-21) H-21			
(OH-23) H-23			
(CH-34) H-34			
(CH-37) H-37			
(CH-47) HC-1			
(UH-1) HU-1			
ALL ROTOR WING			
ALL FIXED WING AND ALL ROTOR WING			
FLIGHT SIMULATORS			
1CA-1			
2B-3			
2B-12			
OTHER			

TED NAME AND TITLE OF REQUIRITIONER

DA FORM 1 NOV 62 12-31 REPLACES

DATE

TYPE OF REQUISITIO
INITIAL
CHANGE

ACCOUNT NUMBER

FROM:

ONAL, AND GENERAL LITERATURE

ANCE LITERATURE
rature is Applicable)

SECTION II - INSTRUCTIONAL AND GENERAL LITERATURE

AND FIELD e	FIFTH DEPOT e	INSTRUCTIONAL f	GENERAL g

NEW DESIGNATORS INCLUDED

You notice right off that both the new and old aircraft designations are carried in Column a. Something else you might have been wondering about, though, is whether you should write in any A, B, C etc. series designators next to each model. Well, the answer's no! The Army multi-part manuals cover all current series for each aircraft model in the same manual—except for the Hueys. But this is being corrected as the TM 55-1520-207 and 208 series are being replaced by a new series number . . . 211 . . . covering both UH-1A's and B's.

OTHER?

What's other? Well, the OTHER block at the bottom of the form means any pub of a general nature but not limited to any specific equipment, or group of equipment, or any of the lines above.

REVIEW ROUTING

You'll notice that the routing has been changed at the top of the form to include a THRU address. That ties in with the instructions on the back of the form (para 8) requiring all company and detachment size units to send their 12-31 through the next higher headquarters. Large units still send their 12-31 direct to St. Louis **unless** local SOP says they have to be reviewed at division, post or army level.

USE THIS BLOCK IF COMPANY OR DETACHMENT SIZE—OR LOCAL SOP SAYS SO

SECTION II BREAKDOWN

Columns f and g were added to separate **instructional** (column f) from **general** (column g) literature. As the instructions on the back (para 7) explain, TC's (Training Circulars) are an example of instructional type pubs while the general description means general category FM's, TM's, etc. if they're applicable to a specific type of equipment or group of equipment such as (R/W and/or F/W).

TRAINING CIRCULARS ON SPECIFIED AIRCRAFT

GENERAL FOR ONE TYPE OR GROUP OF EQUIPMENT

DRONES AND SIMULATORS ADDED

Column a's title has been changed from "Type of Aircraft" to "Subject Covered" because the USD-1 drone has been tacked on to the F/W section and a flight simulators section has been hung on the bottom.

As far as simulators are concerned, the TM 55-6930-200-series is now out on the 1CA-1 . . . the 2B-3 and 2B-3A pubs should be out about now . . . but you'll have to wait until late '63 or early '64 for pubs on the 2B-12.

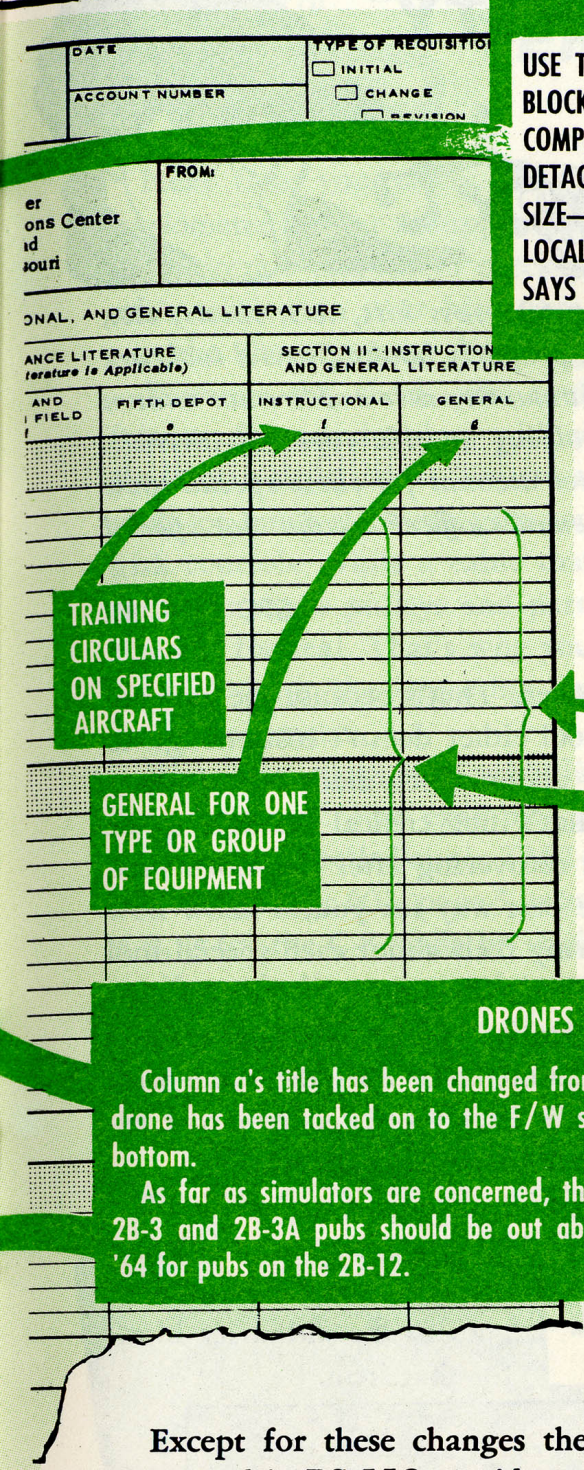
READ THE BACK

Except for these changes the rules stay the same as for the obsolete form explained in **PS 113.** Besides, you've got the instructions right on the back of the form itself.

If you're gonna be part of the program, ya gotta stay current—on the ground as well as in the air.

Windy Windrock

AGAIN



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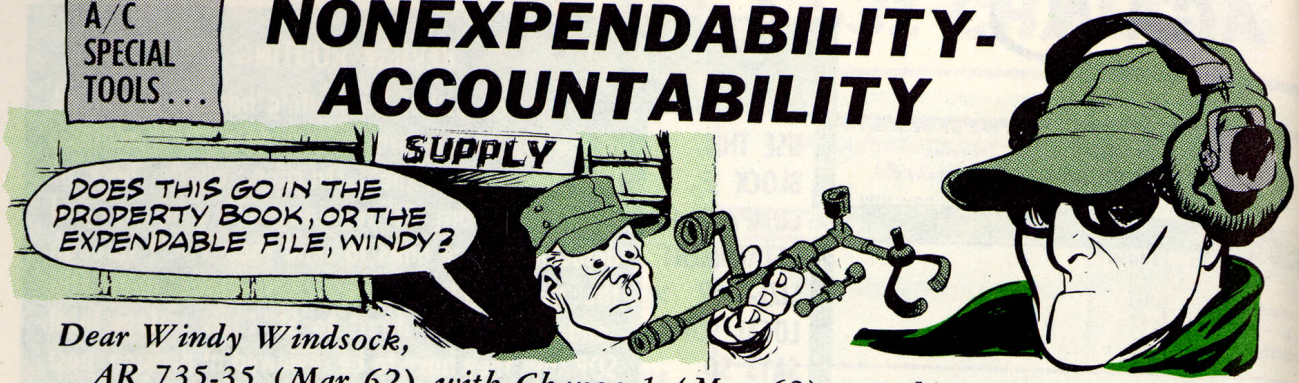
Windy Windsock

A/C SPECIAL TOOLS . . .

NONEXPENDABILITY-ACCOUNTABILITY



Dear Windy Windsock,

AR 735-35 (Mar 62) with Change 1 (May 62) says kits, sets, chests, etc., will be recorded as a single line item in supply property books. Special tools are not mentioned. But they're required for aircraft maintenance and are not known until the unit's been assigned a mission involving specific types of aircraft.

My question is: Will the property book officer account for these special tools in accordance with para 11 or will the maintenance officer account for special tools the same as spare parts and repair parts?

SFC C. F. H.

Dear Sergeant C. F. H.,

First thing ya gotta do is to stop thinking of special tools as kits, sets, etc. Special tools are individual items.

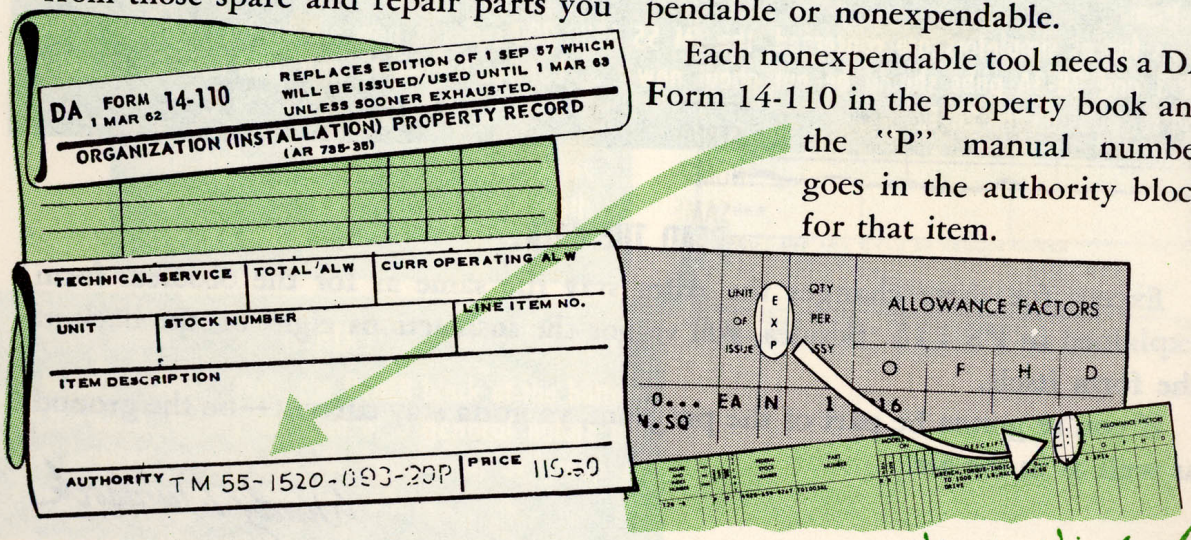
That means you use para 4a instead of para 11 in AR 735-35 as a reference. And the last line of para 4a says property books are kept:

". . . for all **nonexpendable** property issued to the organization."

No need for a special tool that's expendable to be treated any different from those spare and repair parts you mentioned. That's because the expendable tool either doesn't cost enough to worry about or it's made out of material that's not critical enough to be worth recovering after the tool's shot.

The best way for you to know how the Army feels about each special tool is to check Chapter 3 in the -20P for the aircraft types you've got—while field maintenance does the same with the -34P. Each tool is coded either expendable or nonexpendable.

Each nonexpendable tool needs a DA Form 14-110 in the property book and the "P" manual number goes in the authority block for that item.



Windy Windsock

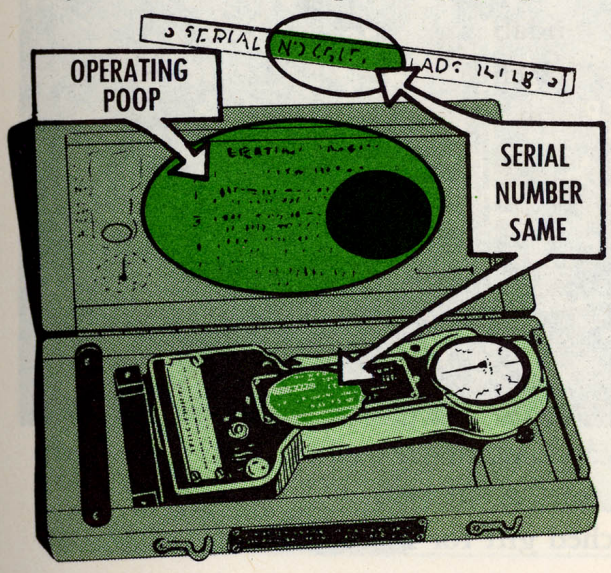
KEEP A TENSE TENSIOMETER

Next time you reach for the C-8 tensiometer in your A Supplemental, B, or C aircraft tool kit to check control cable tension on your bird, remember —make the accuracy check right-off.

Without the check you could get false readings and end up with either a **slack** or a **tight** cable. 'Course a cable with too much slack can give you sluggish controls; while a cable that's too tight can score pulleys and part cable strands, for real. That's why you want to stick with the operating info for your tensiometer.

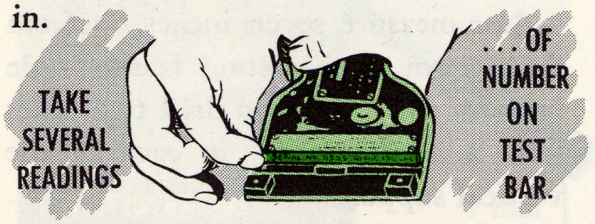
The instructions vary with different manufacturers. For example, the accuracy check spelled out in TM 1-33A3-3-1-101 (5 Apr 60), page 3, paragraph 4-9, is for the C-8 made by Pacific Scientific and allows you only a plus-or-minus one pound margin of error.

But suppose you have the C-8 made by WacLine. The operating poop and accuracy check are smack-dab in front of you when you open the case cover. Accuracy on this baby should be within two per cent of the test number stamped on the calibration bar.

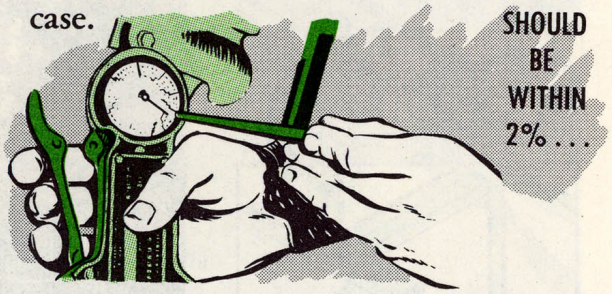


When you actually make the check, be sure the bar has the same serial number as the tensiometer it was calibrated with . . . because this can change each time the tensiometer and bar go back for recalibration.

Set the gadget for the smallest cable size listed (1/16-in), and put the bar in.



Let loose of the actuating handle so that the jaws grip the bar. The 1/16-in dial reading on the WacLine should be within two per cent of the stamped number on the test bar—156 in this case.

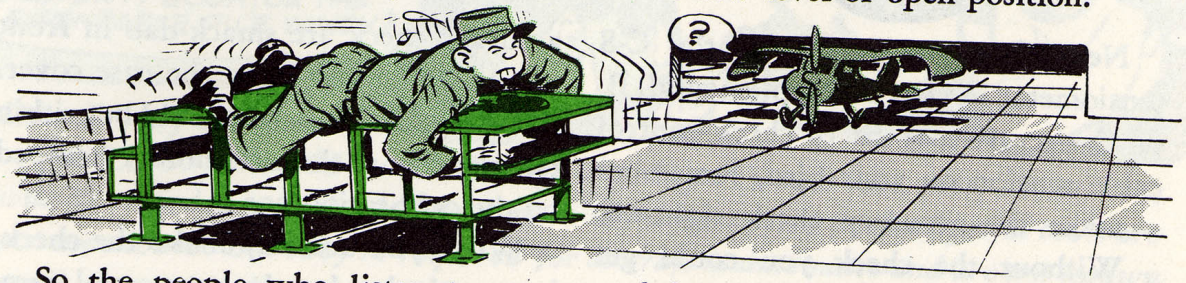


Take several readings and if the average is not within the two per cent range of 153-159, you know the tensiometer's been through the mill and needs to be turned in for repair . . . soonest.

STEADY THE PLATFORM—OR . . .

STOP THE ROCK WITH A LOCK

Been a few complaints on that flopover maintenance stand (FSN 1730-624-0684) being kind of shaky to stand on in the low level or open position.

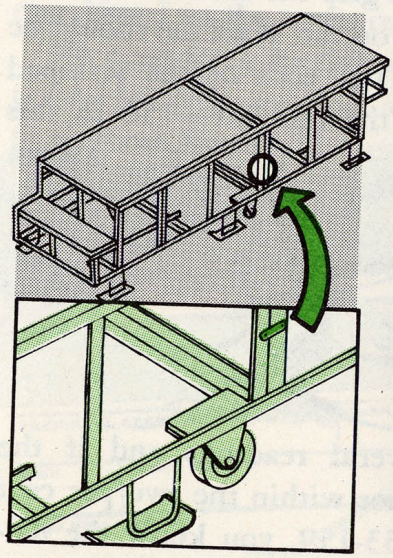


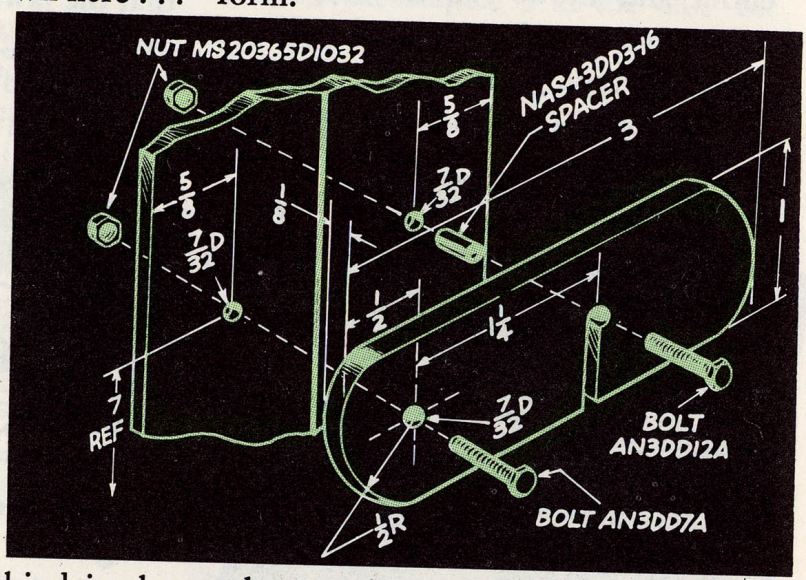
So the people who listen to complaints passed the word on to the manufacturer, who's now adding on a real simple catch-type lock at the factory. You can do the same right in your own hangar if you're having the same rock 'n' roll trouble.

Just measure seven inches up from the bottom of the center frame angle on both sides . . . and drill two holes with a 7/32-in drill in each of the vertical supports.

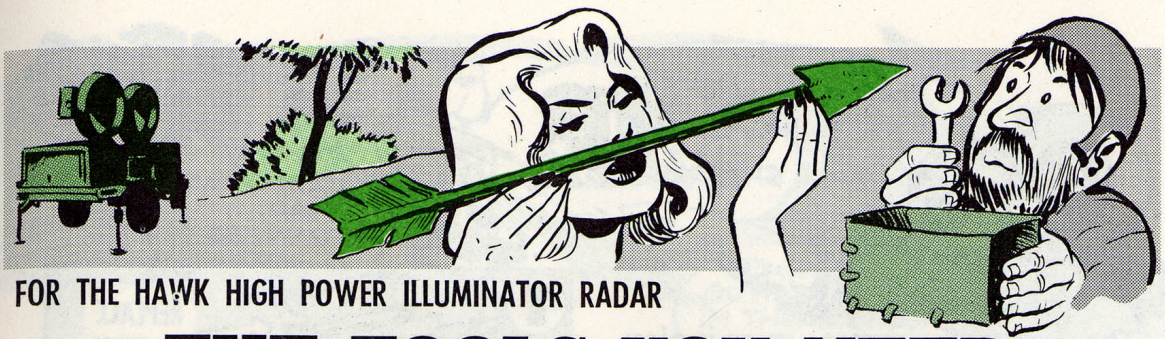
Now make up two each aluminum catches (QQ-A-362) as shown here . . . and fasten the catch through the bolt hole on each side with an AN3DD7A machine bolt (FSN 5306-559-8135) and an MS 20365-D1032 self-locking nut (FSN 5310-059-9908).

After installing the latch, you can now locate the other two holes—for the AN3DD12A machine bolt (FSN 5306-151-2186) and the NAS43DD3-16 spacer (FSN 5340-684-2093). Insert this bolt through the spacer and use the same size self-locking nut to snug it up from the inside of the platform.





There shouldn't be any bind in the catch mounting and the slot in the catch should be cut to line up with the spacer for a good lock.
This idea is offered as a no-strings-attached gift for PS readers.



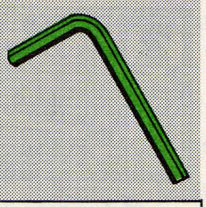
FOR THE HAWK HIGH POWER ILLUMINATOR RADAR

THE TOOLS YOU NEED

Here you are . . . the tools that you Hawk outfits need when you get yourself the high power illuminator radar. They come from Quartermaster and are added to SM 9-4-4935-A02, FSN 4935-724-9092.

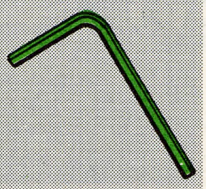
The tools're listed in Volumes 2, 3 and 4 to FSC C6-5-SL (SM 10-1-C6-5-SL).

KEY, SOCKET HEAD SCREW: Hex type, L-type handle, nonsparking and nonmagnetic, 5/16-in width across flats, 4 1/8-in nom arm length, MIL-W-21120.



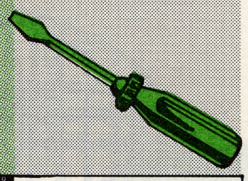
FSN 5120-189-2987 — 1 Each

KEY, SOCKET HEAD SCREW: Hex type, L-type handle, nonsparking and nonmagnetic, 1/8-in width across flats, 2 5/16-in nom long arm length, MIL-W-21120.



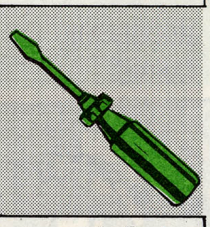
FSN 5120-189-2992 — 2 Each

SCREWDRIVER, FLAT TIP: Flared tip, plastic handle, nonsparking and nonmagnetic, 1/4-in tip width, 3 3/4-in blade length, Ord part / dwg number 9001263.



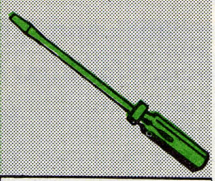
FSN 5120-561-8021 — 1 Each

SCREWDRIVER, FLAT TIP: Flared tip, plastic handle, nonsparking and nonmagnetic, 3/32-in nom tip width, 3-in nom blade length, MIL-T-16243, type C.



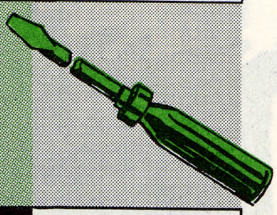
FSN 5120-242-5862 — 1 Each

SCREWDRIVER, FLAT TIP: Flared tip, plastic handle, nonsparking and nonmagnetic, 5/16-in nom tip width, 6-in nom blade length, MIL-S-21111, type I.



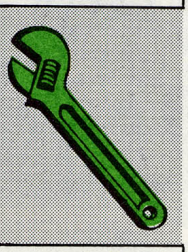
FSN 5120-293-1608 — 1 Each

SCREWDRIVER, FLAT TIP: Flared tip, plastic handle, nonsparking and nonmagnetic, 3/8-in nom tip width, 21-in nom blade length, MIL-S-21111, type I.



FSN 5120-287-2503 — 1 Each

WRENCH, OPEN END, ADJUSTABLE: Single head, nonsparking and nonmagnetic, jaw opening capacity 0 to 0.760, nom o/a length 6-in, MIL-W-17912, type I.



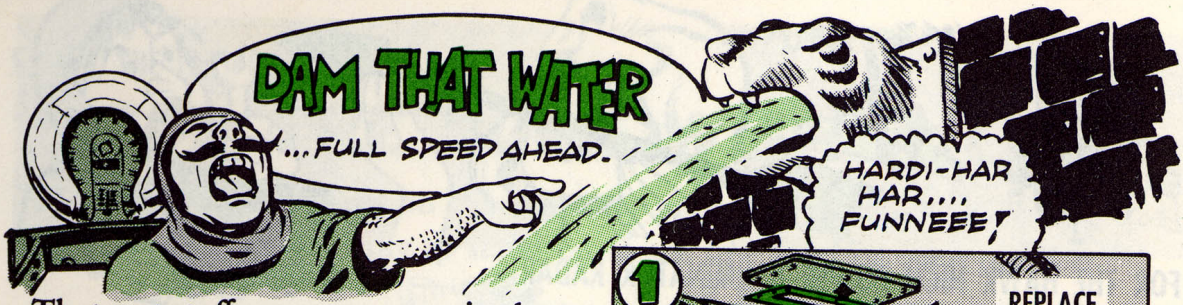
FSN 5120-278-0340 — 1 Each

WRENCH, OPEN END, ADJUSTABLE: Rated nonsparking and nonmagnetic, single head, 8-in nom length o/a, 0 to 15/16-in jaw opening capacity, MIL Spec MIL-M-19595.

FSN 5120-513-7416 — 1 Each

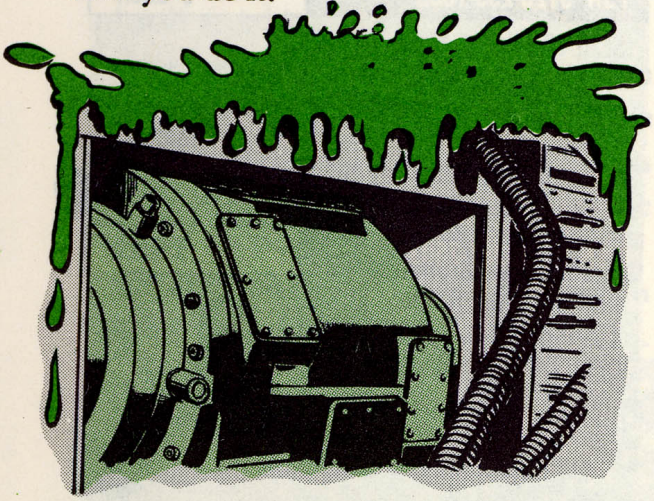
WRENCH, SOCKET: Single socket spinner type, fixed handle, hex socket, 1/4-in socket size, 0.344 in outside diameter of socket, 2 3/4-in nom o/a length, ref dwg group 182, style 9.

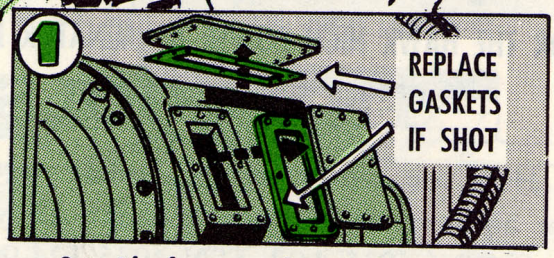
FSN 5120-801-7865 — 1 Each



That wet stuff—water—sure is playing hob with the resistor, FSN 5905-735-6227, OPN 9056018, and the synchro, FSN 5990-812-1439, OPN 9056158, in the elevation head on some AN/MPQ-33 Hawk radar sets. The water gets inside the head and knocks the resistor and synchro out of whack. Sound familiar?

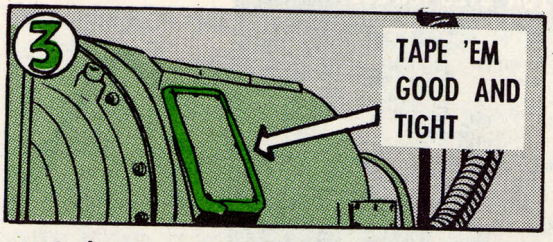
There's no sense to giving in—not when you can whip the problem. Here's how you do it.





Get rid of any gaskets and seals in the head that're shot. Replace 'em with new ones—naturally.

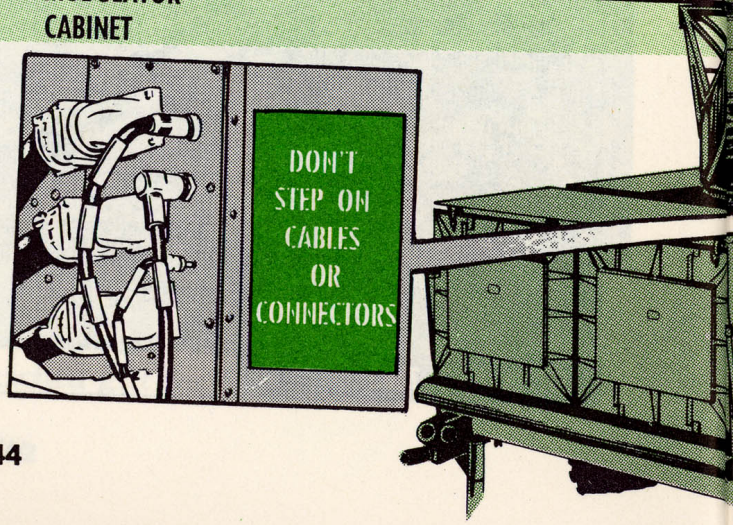
Make sure all bolts are tight.



And use waterproof tape to seal off places where water might sneak by.

Maybe it'll work . . . and maybe it won't.

It sure won't hurt none to stencil a warning on the modulator cabinet of your Hawk AN/MPQ-35 pulse acquisition radar. It ought to read something like this.



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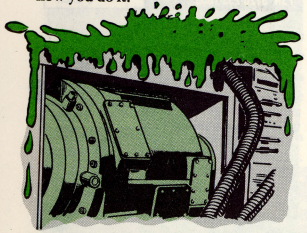

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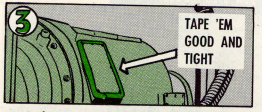


And use waterproof tape to seal off places where water might sneak by.

Dear Half-Mast,

Let's get down to cases with the Hawk missile.

I mean just how much flaking or chipping of the rokhide liner in the exit nozzle is allowed? And what's the story on discoloration of the nozzle. There's nothing in TM 9-1410-500-12 about either of these things.

Sgt D. C.

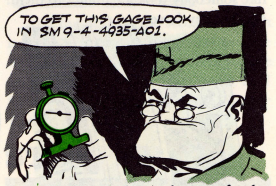
Dear Sergeant D. C.,

You're right. The TM's silent on the two subjects, so far.

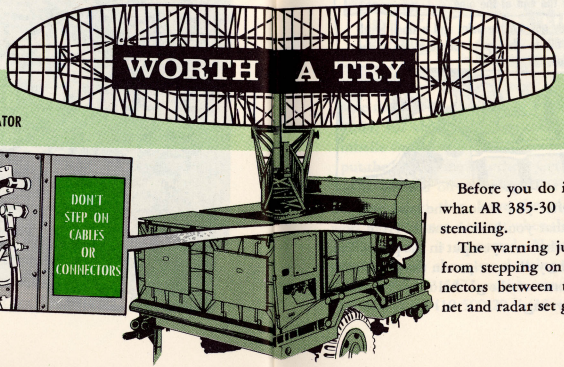
So that you'll be ahead of the game, tho, what you want to know is that chipping or flaking of rokhide that goes .010-in deep or more means the nozzle has to be replaced. You measure the depth with Gage, depth, dial indicating, FSN 5210-710-4359.

The gage is listed in SM 9-4-4935-A01 (20 Dec 62).

And don't get in a lather about the color of the nozzle. A change of color means nothing.



Half-Mast



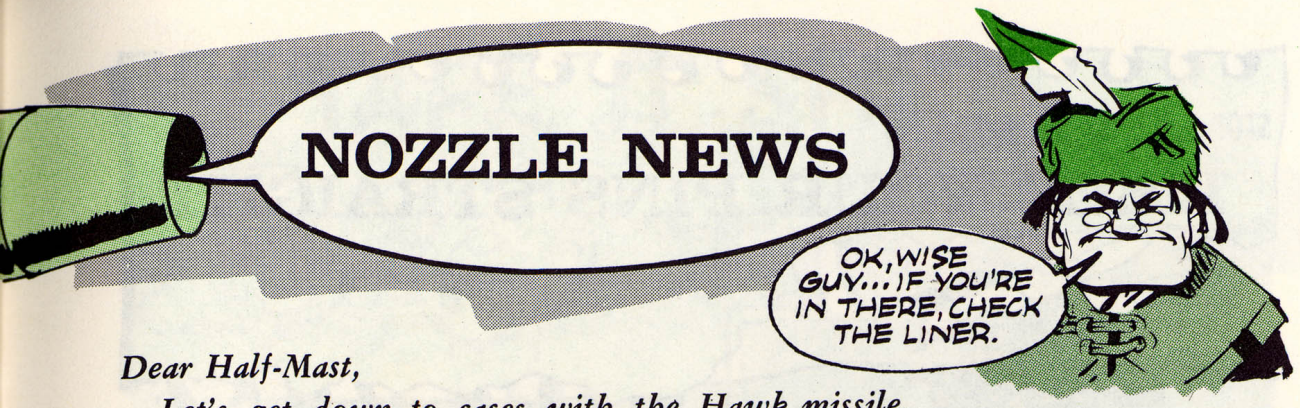
Maybe it'll work . . . and maybe it won't.

It sure won't hurt none to stencil a warning on the modulator cabinet of your Hawk AN/MPQ-35 pulse acquisition radar. It ought to read something like this.

Before you do it, you want to read what AR 385-30 (Jun 57) says about stenciling.

The warning just might keep guys from stepping on the cables and connectors between the modulator cabinet and radar set group.

NOZZLE NEWS



Dear Half-Mast,

Let's get down to cases with the Hawk missile.

I mean just how much flaking or chipping of the rokhide liner in the exit nozzle is allowed? And what's the story on discoloration of the nozzle. There's nothing in TM 9-1410-500-12 about either of these things.

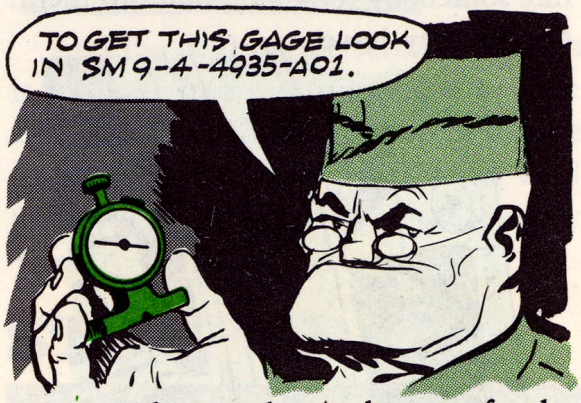
Sgt D. C.

Dear Sergeant D. C.,

You're right. The TM's silent on the two subjects, so far.

So that you'll be ahead of the game, tho, what you want to know is that chipping or flaking of rokhide that goes .010-in deep or more means the nozzle has to be replaced. You measure the depth with Gage, depth, dial indicating, FSN 5210-710-4359.

The gage is listed in SM 9-4-4935-A01 (20 Dec 62).



And don't get in a lather about the color of the nozzle. A change of color means nothing.

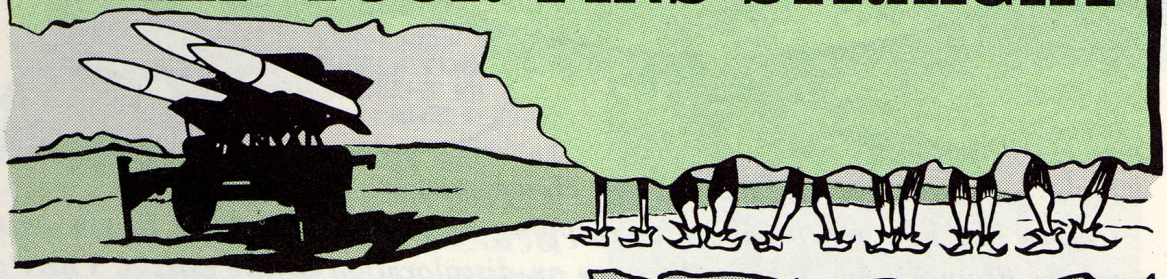
Half-Mast

Before you do it, you want to read what AR 385-30 (Jun 57) says about stenciling.

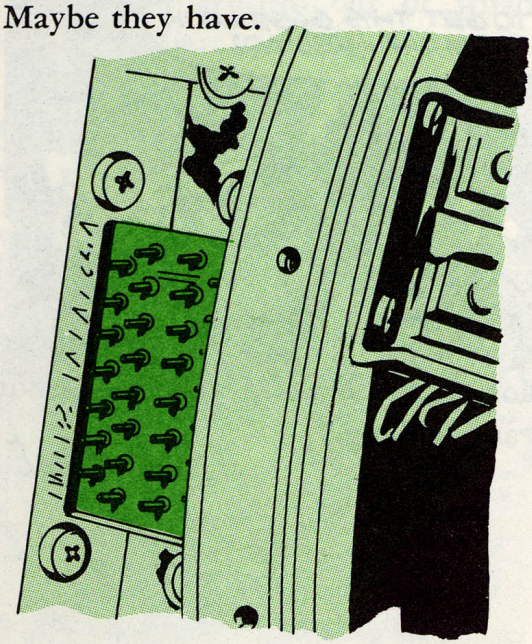
The warning just might keep guys from stepping on the cables and connectors between the modulator cabinet and radar set group.

STOP GETTING THE NEEDLE...

KEEP YOUR PINS STRAIGHT



Do the pins on your Hawk missile gimbal ring electrical connectors look like somebody took a hammer to them? Maybe they have.

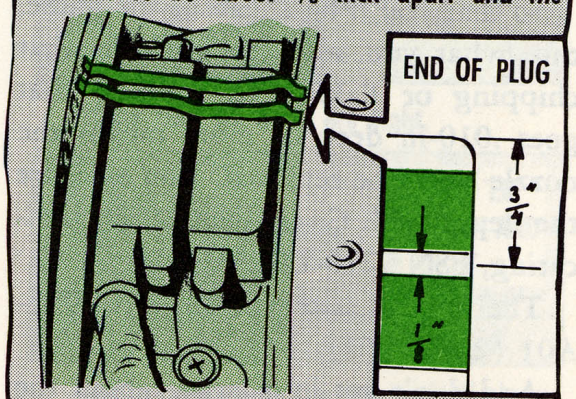


More'n likely, tho, some guy has probably tried to mate the plug with the pins without first making sure the whole works lined up. It doesn't take much doing to pull this kind of goof.

But there's a way to make sure it doesn't happen again—sure enough. And you get a bonus . . . no more mixed-up connections.

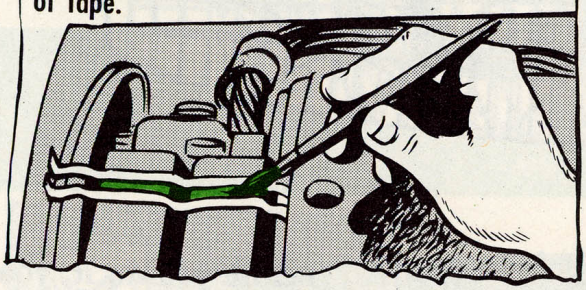
The first thing you do is latch on to a one quart can of yellow lacquer that you can find on page 4 of TM 9-4935-501-20P/1 under FSN 8010-865-0372.

Then you mate the connectors and plugs. This is one time you don't want to goof. Next . . . fasten strips of masking tape across the upper end of each plug and on to each side of the gimbal ring. The strips want to be about 1/8 inch apart and the



center point between them some 3/4 inch from the end of the plug.

Now get out the paint and a small brush and fill in the space between the strips of tape.



After you remove the tape, you can see that you have it made. From now on, whenever you put in the plugs, line up the yellow stripes on the plugs with the ones on the gimbal ring. You can't go wrong.

TAPE IT SHUT

One question usually follows another whenever a Hawk missileman looks at the missile warhead shell.

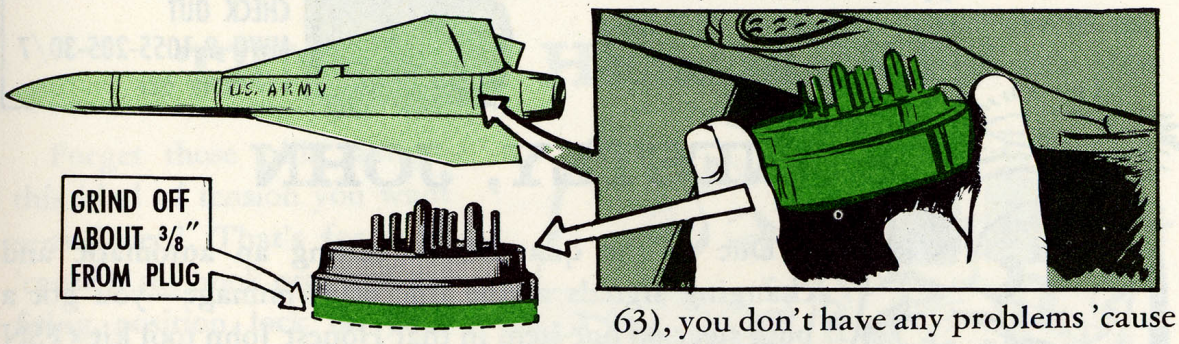
First: What's with the destructor plug access door?

Second: Can it be taped shut?

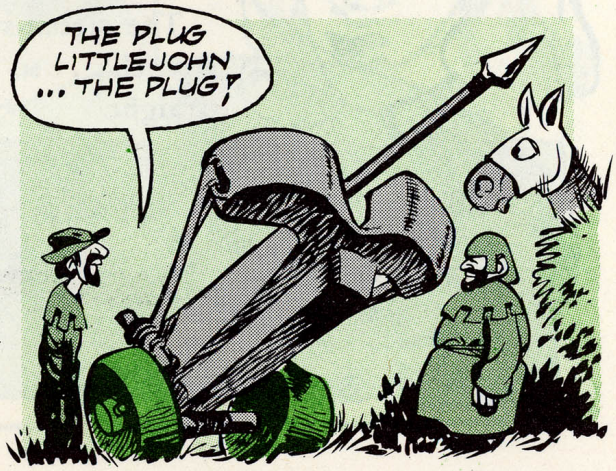
The answer to the first question is that the access door was put there so's the destruct plug could be used when telemetry equipment was put in the missile in place of the warhead for tests and evaluations.

And the deal on the second question is that the door can be taped shut. The tape to use is Tape, pressure sensitive water-proof. You can get it under FSN 8135-721-9756 from Defense Supply Center.

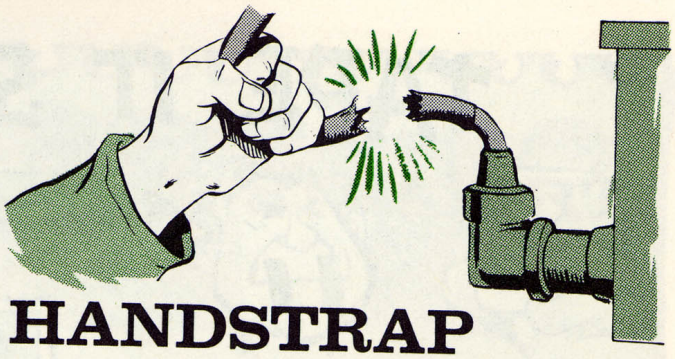
DAMAGE STOPPER



You know one good way to make sure the shorting plug, FSN 5935-767-1664, for the aft end of your Hawk missile doesn't take a beating when you put the bird on the launcher? Get about 3/8-in ground off the plug. That's the answer. And then leave the plug in place at all times—except when the umbilical cable is connected. Naturally. If you have the new shorting plug, FSN 5935-863-5671, which was added by MWO 9-1410-500-20/1/15 (4 Jan 63), you don't have any problems 'cause it's made so it doesn't take a battering.

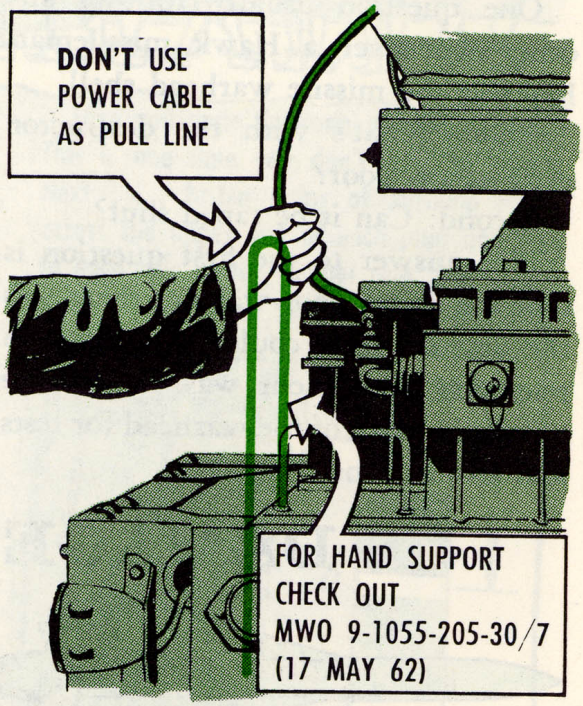


NEGATIVE, NEGATIVE . . .



IT'S NO HANDSTRAP

Careless Johns become real threats to Honest John by using the power cable between the main junction box and the launching beam as a pull-line to heave themselves aboard the M386 truck-mounted HJ launcher. The cable's built to carry AC power and ignition-interlock wires for limit switches . . . not for hand massages that'll bust it and short-circuit your operation in a hurry. So—if you need help—use the steel hand support. One more thing—if your launcher doesn't have hand supports like these, check out MWO 9-1055-205-30/7 (17 May 62), with the people up the line.

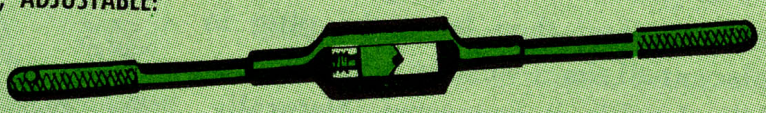


HONESTLY, JOHN

Due to the quarterback calling an automatic and changing signals at the line of scrimmage—you got a bum steer on one item in that Honest John tool kit (FSN 5180-034-8470) that appear on page 42 of PS 118.

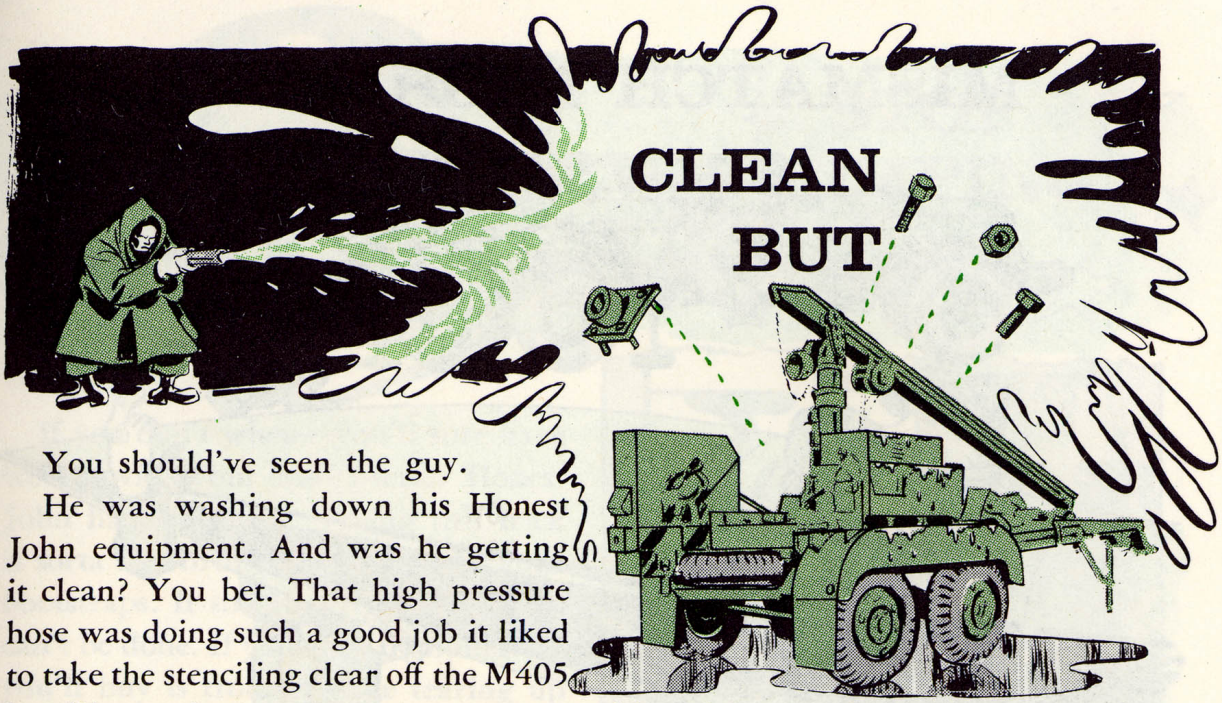
The signal-switch hit the adjustable tap and reamer wrench . . . so here's the correct picture story to set you straight.

WRENCH, TAP AND REAMER, ADJUSTABLE: stght hdl type, no. 8 to 3/4-in bolt tap holding cap, 11-in lg overall.



FSN 5120-289-0539

CLEAN BUT



You should've seen the guy.

He was washing down his Honest John equipment. And was he getting it clean? You bet. That high pressure hose was doing such a good job it liked to take the stenciling clear off the M405 handling unit.

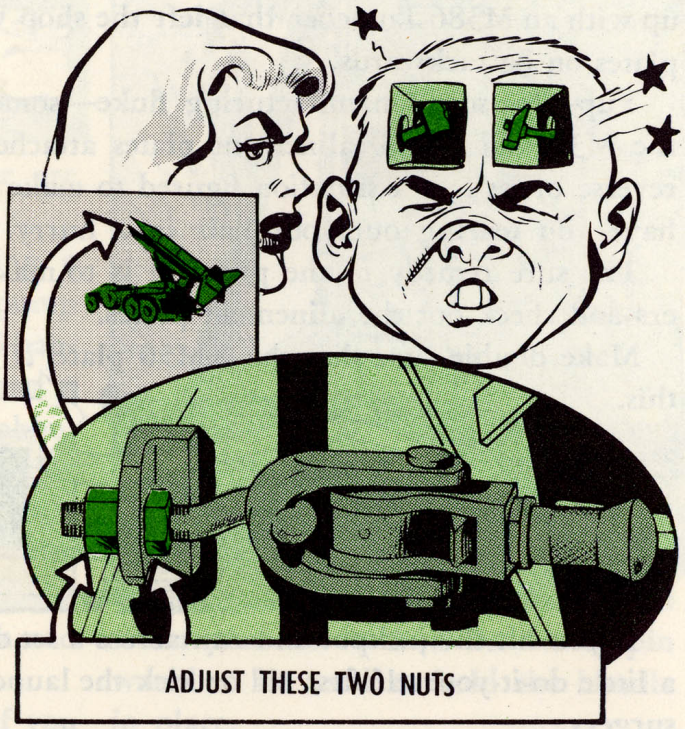
And the M25 generator set . . . you could hardly see it for the water that was splashing on and around it.

'Course . . . when they went to start the generator the next day, they found it was soaked. And start? The only thing that started was the crew—after the guy who had played fireman with the hose.

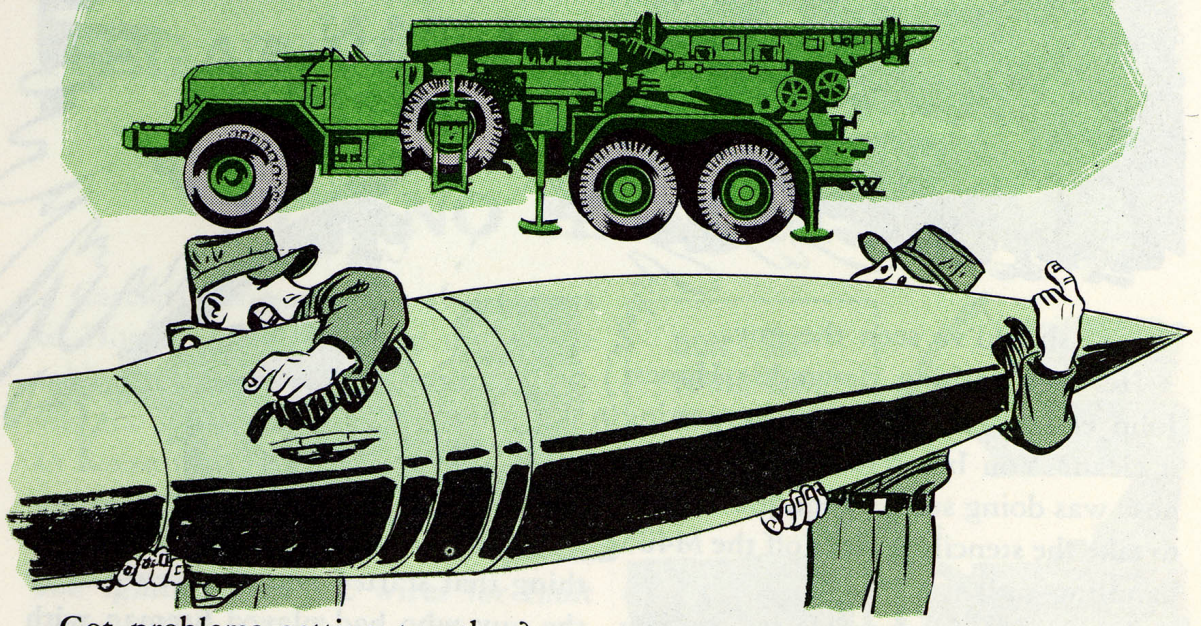
It's a good thing you don't use a high pressure hose—or steam—around your equipment. You'd have the same kind of trouble.

TENSION HEADACHE?

Forget those pills, amigo, this kind of tension you want —and need. That's for true, 'cause if the hook group of the firing position lock on your M386 Honest John launching beam joins with no sweat, you could be headed for real trouble—like a goosed bird as it leaves the pad. So, if you don't have to push a little to lock things snug—and the detent on the knob assembly doesn't drop in the hole—adjust the two nuts on the hook stem or get your support to take a looksee.



MISMATCH MISHMOSH



Got problems getting together?

Like maybe your M386 Honest John rocket launcher and M405 handling unit appear to be feuding and have suddenly turned shy about matching up like they should?

And, as a result, no amount of pushing and heaving can get 'em lined up right when you're loading an XM50 or M31 rocket.

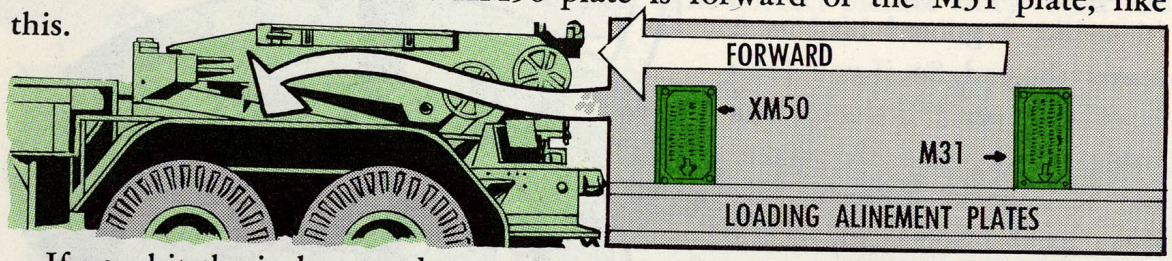
True? Well spare the axe and give a listen.

It just could be that your outfit was one of the "lucky" H-J units that ended up with an M386 launcher that left the shop with the rocket loading alinement plates on bassackwards.

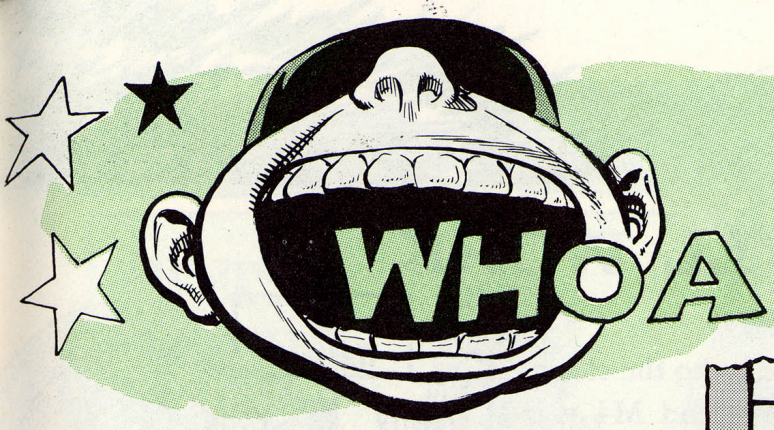
Yup—by some manufacturing fluke—some of the M386's were issued with the M31 and XM50 alinement plates attached to the left rear fender in that reverse order . . . a situation figured to make correct alinement impossible and have you tearing out your hair in a hurry.

The sure remedy to the problem is to make a fast tour of your H-J launchers and check out the alinement plates.

Make double sure that the XM50 plate is forward of the M31 plate, like this.

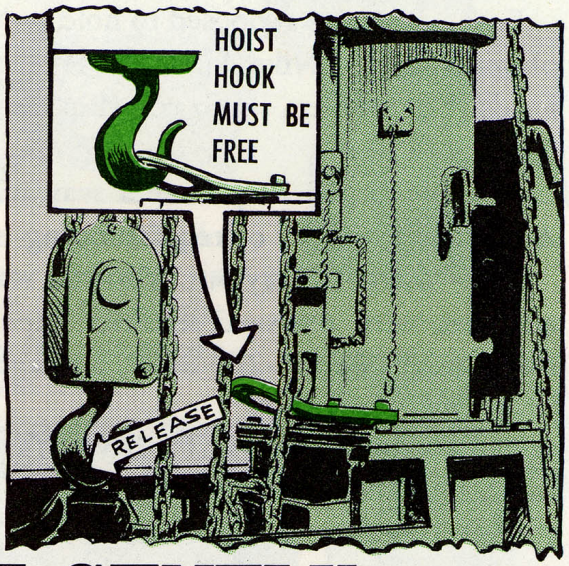


If you hit the jackpot and run across a set of mismatched plates either apply a little do-it-yourself first aid or kick the launcher back to support for corrective surgery.

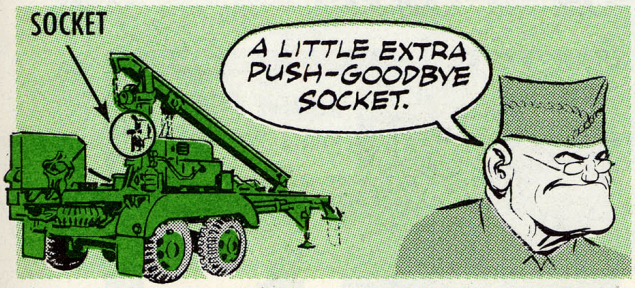


STOP PUMPING

If you don't whoa—you'll sure have woes—with your M405-series Honest John handling unit. Trying this trick is sorta like lifting yourself up by your bootstraps. It sounds great, but it just can't be done. If you keep pumping, all you'll buy is trouble—like tearing up the lower strut bracket. So, make sure the hoist hook is free of the bracket—before you make with the hydraulic muscle. OK?



STROKE IT GENTLY



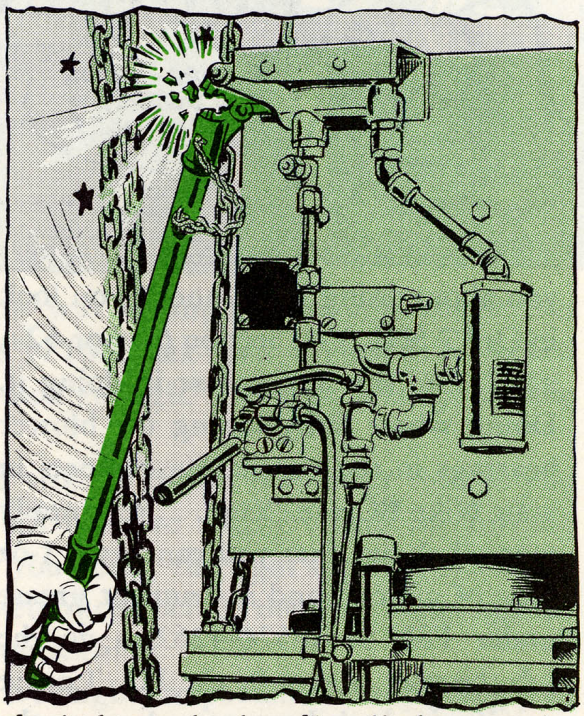
Are they taking a beating or are they taking a beating?

If getting busted means taking a beating, then the hydraulic pump socket on some Honest John M405 handling units are taking a beating.

Sure . . . it doesn't say anything about it in TM 9-1055-208-12. Just the same, tho, when you reach the end of each stroke with the pump handle—stop. That's **stop**, like in **halt.**

All it takes is a little extra push and the socket is a gone goner.

The socket'll also be hurting if you don't have the handle all the way in when you use it. And the cotter pin wants to be used to hold the handle in place.



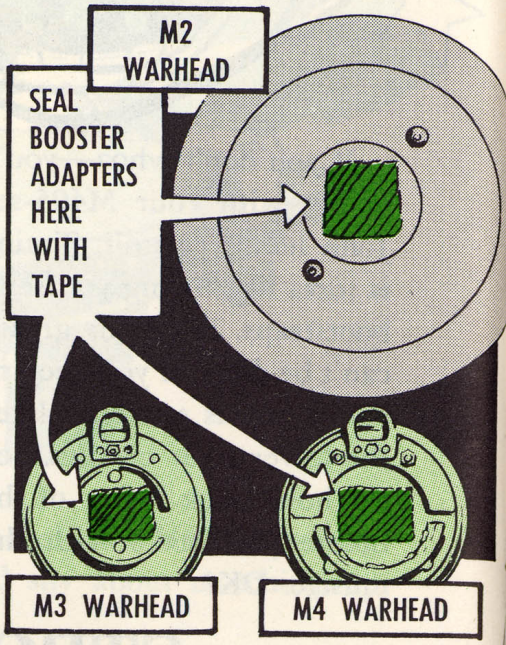
TAPE'LL WORK

Sure . . . you're supposed to hold on to the closing plugs for your Nike-Ajax M2, M3 and M4 warheads. You use 'em when you ship the warheads up the supply line.

Trouble is . . . they have a way of getting lost. And there's no way of requisitioning new ones.

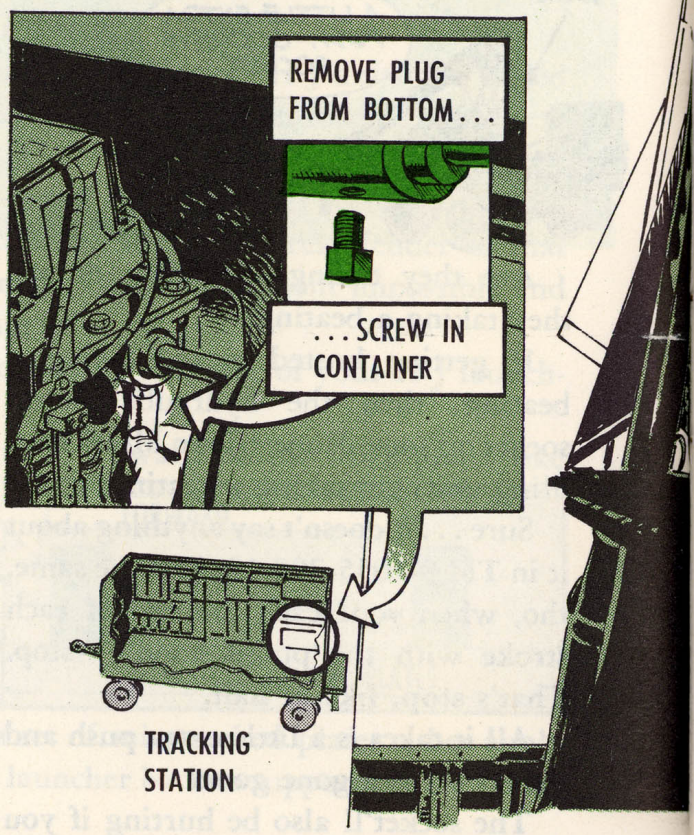
But—there's a way out. You can seal the booster adapters with pressure sensitive tape. You'll find the tape, FSN 8135-269-8089, on page 28 of Ord 7 SNL Y-2 (Aug 61).

Your support people'll tell you that the info on using the tape is in paragraph 59 of Change 3 (23 Aug 60) to their TM 9-1970-2-35.



LUBE IN A TUBE

LO 9-1430-250-20 (Nov 61) tells you about doing it . . . and if you look in Ord 7 SNL Y-4, Section 6 (Apr 62), you'll find the stuff to use in doing it. Doing what? Why lubing the blower bearings in the ventilating cabinets in your Nike BC van. Yup . . . the supply manual shows that you can get a 1-oz tube of aircraft and instrument grease under FSN 9150-576-4262 to do the job the way it says in the LO. 'Course . . . if you don't have any plugs on the bottom of the bearings, you've got the self-lubing kind. Then you steer clear of the grease.



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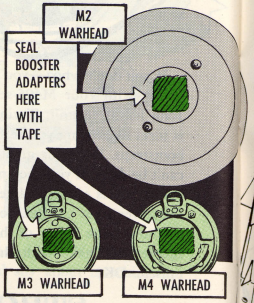

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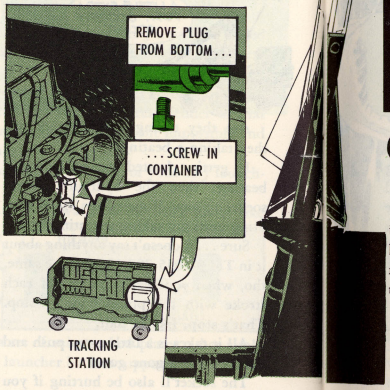
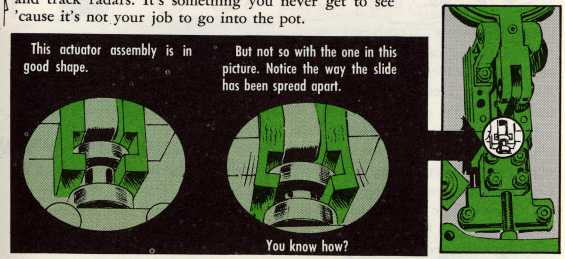


POTS GOING TO POT?

Seeing's believing . . . so take a look—a good look.

What you're eyeballing is the actuator assembly in the data potentiometers for your Nike-Hercules missile and track radars. It's something you never get to see 'cause it's not your job to go into the pot.



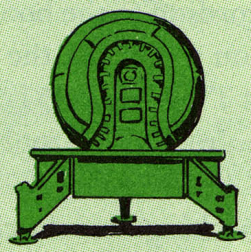
It happens that some guy was making his zero adjustment. But he didn't stop turning his 5/16-in hex-head wrench as he locked the clutch—at least not soon enough. The slide was spread too far to move back.

It's real simple to avoid this kind of trouble if you remember that as you turn the wrench to lock the clutch, you'll come to a spot where the turning becomes a little tight. Keep going. Once you get by the tight spot, the wrench'll move freely again for about two complete turns before the slide butts against the block. That's when you want to stop turning.

Another thing . . . it's mighty important to keep going past that tight spot when you're locking the clutch. The reason the turning gets on the tight side is this: At that point the actuator is starting to move up and the roller bearings in the yoke get to binding in the yoke. Things are built that way.

MORE

POTS GOING TO POT?



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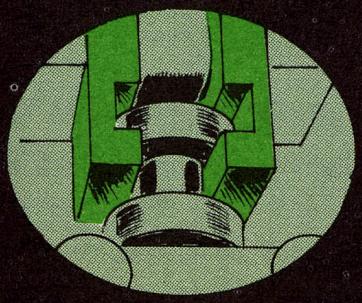
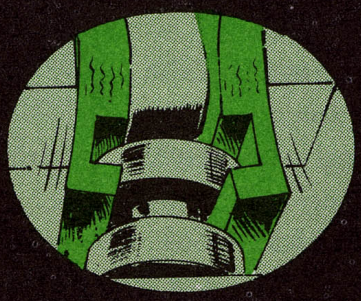
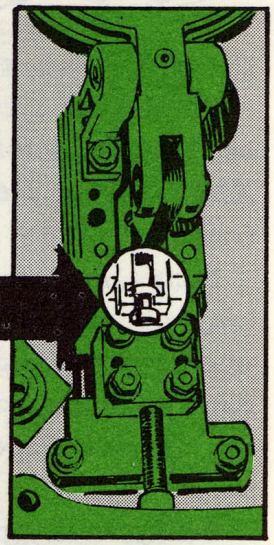
This actuator assembly is in good shape.

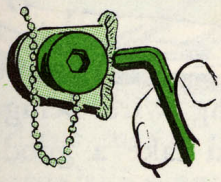


But not so with the one in this picture. Notice the way the slide has been spread apart.



You know how?





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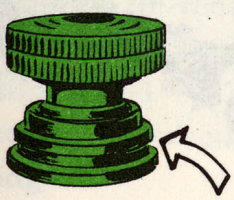


Another thing . . . it's mighty important to keep going past that tight spot when you're locking the clutch. The reason the turning gets on the tight side is this: At that point the actuator is starting to move up and the roller bearings in the yoke get to binding in the yoke. Things are built that way.

P.S. MORE

But, if the bearings don't get freed by your locking all the way, they'll drag to beat the band when you turn the power back on and the antenna starts to spin. Because the bearings weren't built to take this kind of punishment, they'll break up. And then you won't be able to make your zero adjustment—no how.

Now . . . supposing you do everything according to the book and you find you have backlash. Don't give in to the temptation to get out the wrench again and start turning a little more. Instead, check out TB 9-1430-251-20/2, dated 5 Aug 59, for the official how-to-do-it word. If you're still in trouble see if your support outfit can't latch on to a copy of TB 9-1430-253-34/3, dated 10 Aug 59. Both of these TB's spell out the word for checking for clutch slippage.

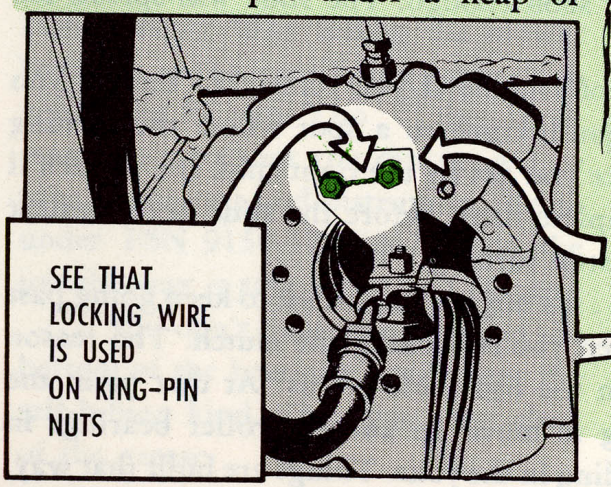
STOP, LOOK, TIGHTEN

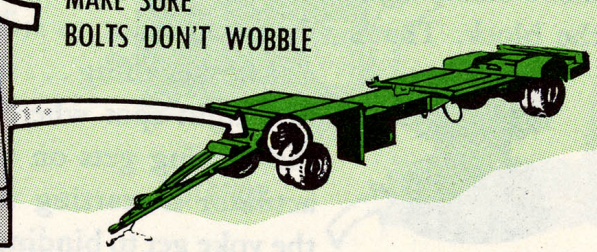
Using your eyes and hands can head off trouble before it starts on your XM 529 Nike-Hercules guided missile trailer.

Seems like some outfits have had the king-pin nut-lock bolts for the front undercarriage fifth wheel shear off. Kind of embarrassing, too—the way the undercarriage and vehicle would part company.

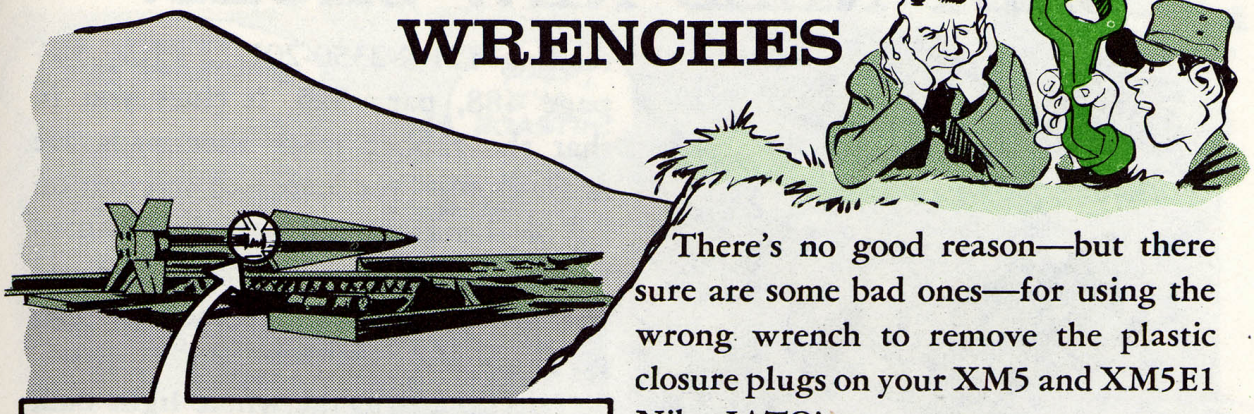
This can happen if the two bolts holding the king-pin nut become loose —like when locking wire's not used. The bolts are put under a heap of strain when they are not tight. So, until bolts with more "beef" in 'em come along (and even when they do), check the king-pin nuts now and again.

If they're not fastened with locking wire, tighten 'em and then use the locking wire. Check first, tho, to make sure the bolts are still in good shape. And if the bolts have any wobble to them even with locking wire being used, remove them and take a good look. Any sign that they about have had the course is all the reason you need for replacing them—naturally.

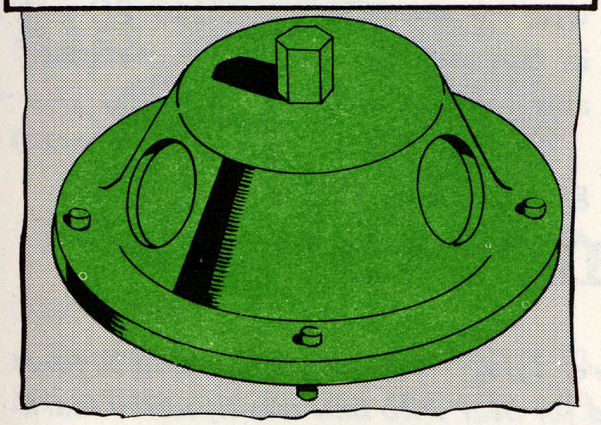




THE RIGHT WRENCHES



TO REMOVE CLOSURE PLUGS—
USE BOOSTER IGNITER ADAPTER
(FSN 4935-448-0198) OR
SPANNER WRENCH (FSN 5120-303-5160)

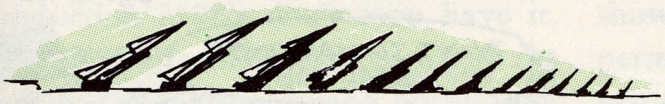


There's no good reason—but there sure are some bad ones—for using the wrong wrench to remove the plastic closure plugs on your XM5 and XM5E1 Nike JATO's.

Taking the plug out with any wrench you get your hands on can set off sparks that could ignite the booster. Or maybe the threads'll get battered so the igniter doesn't seat right . . . and this'll mean a missile malfunction.

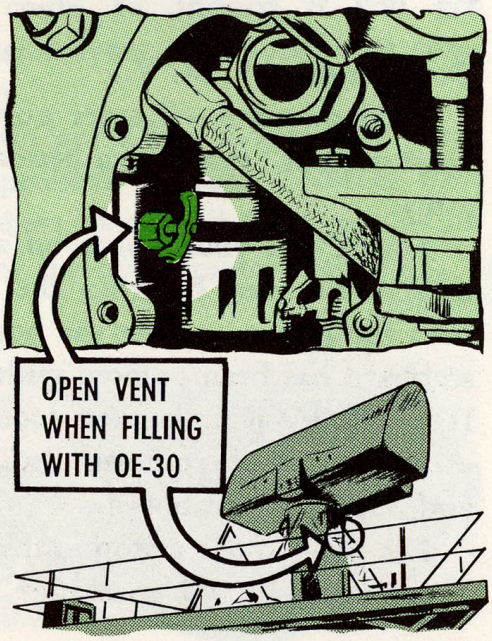
So use the right wrench—booster igniter adapter (FSN 4935-448-0198) or spanner wrench (FSN 5120-303-5160) that're in your SM 9-4-4935—No. 1 tool set—to remove the plug. And if one or the other doesn't work, sing out for your support unit.

OPEN THE VENT



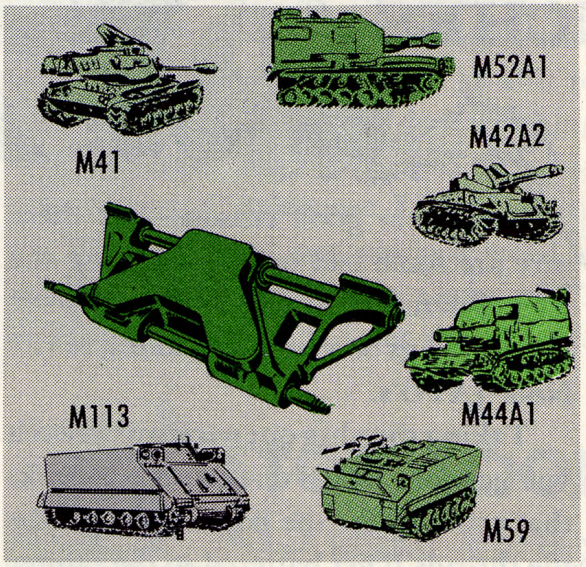
The people who are in the know say that the drive motor oil seal on your Nike-Hercules acquisition antenna is made so's there won't be a lot of oil leakage in the antenna drive. That means if yours has a bad case of leaks, don't bet that the oil seal is the troublemaker.

The answer might be something real simple—like the air vent not being open when you put oil in the antenna drive. And it sure tells you in LO 9-1430-250-20 that you open the air vent when you're filling up with OE-30 lubricating oil.



OPEN VENT
WHEN FILLING
WITH OE-30

BABY NEED NEW SHOES?



The rubber track shoe pads on your light tank type vehicle wearing out too fast?

You can save your baby's shoes—and your unit's consumer funds—by reading TM 9-2350-201-12 (July 58) page 488, para 325. It clues you in that the rubber track shoe pads are needed only "for increased traction on icy or slippery roads, training maneuvers, or operation on hard surfaced roads." The rest of the time baby can go barefoot.

This applies to the whole light tank family including all types of the M41 tank, the M52A1 105-MM SP howitzer, the M42A2 twin 40-MM SP gun, and the M44A1 155-MM SP howitzer. Likewise for the M59 and M113 PC and, in fact, any vehicle that uses replaceable track shoe pads.

TM 9-2630-200-14, page 13, para 9 gives more pad dope.

TAB THE TAB

Dear Half-Mast,

I know the story about old golfers never dying—but what happens to bayonet scabbards when they're turned in loaded for bear with unit identification markings? Are they automatically tossed into the scrap pile or can they be refinished—just curious?

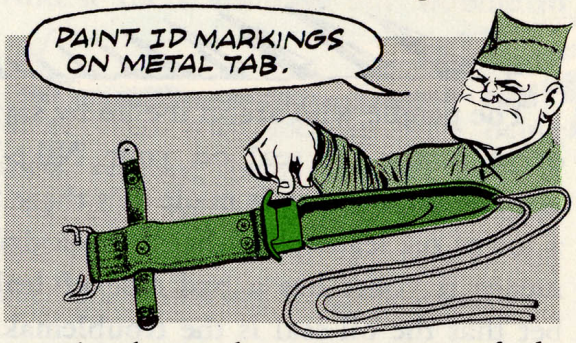
Sgt E. M. V.

Dear Sergeant E. M. V.,

Good question—if more guys were "just curious" this'd be a better man's army.

You've put your finger on a situation that's been bugging the supply boys for years . . . once the body of a scabbard has been painted with a unit ID mark it's Katy-bar-the-door as far as being able to refinish the surface and reissue the scabbard.

The way to put a stop to this waste is to paint the ID markings on the



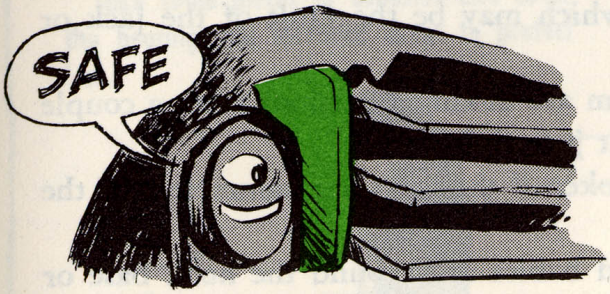
metal tab on the upper part of the body of the scabbard. This way—when the scabbard is turned in—it can be easily refinished and reissued as a serviceable item of supply.

Half-Mast

M88 VTR COOKOUT

Dear Half-Mast,

We cured a little trouble we've been having with our M88 VTR's. When the engine got to a high RPM, the flames shot out the sides of the grille and burned the rear tail lights off.



We prevented barbecued tail lights by shaping and welding a chunk of quarter-inch flat steel stock like it shows in the drawing.

CWO C. P.

Dear Mister C. P.,

Sounds like you been running with the deflector in the top position. The notch that puts the deflector in the top position is **not** for use. In fact, late production M88's don't even have it.

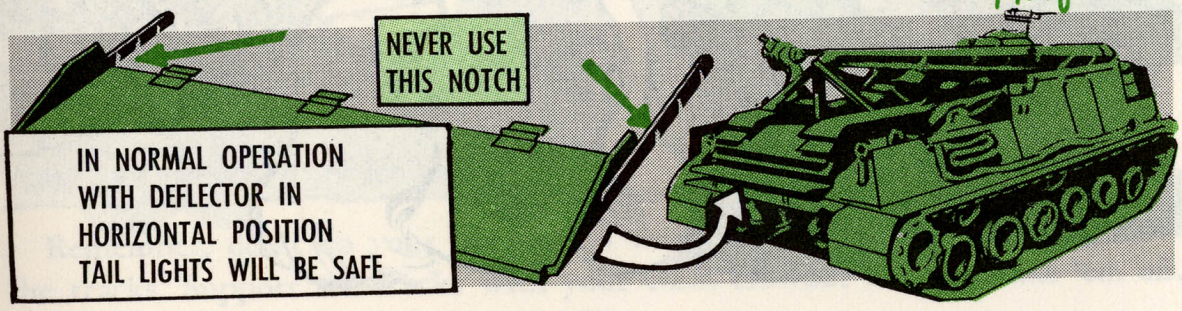
In the horizontal position, where the deflector should be during normal operation, your tail lights ought to be safe.

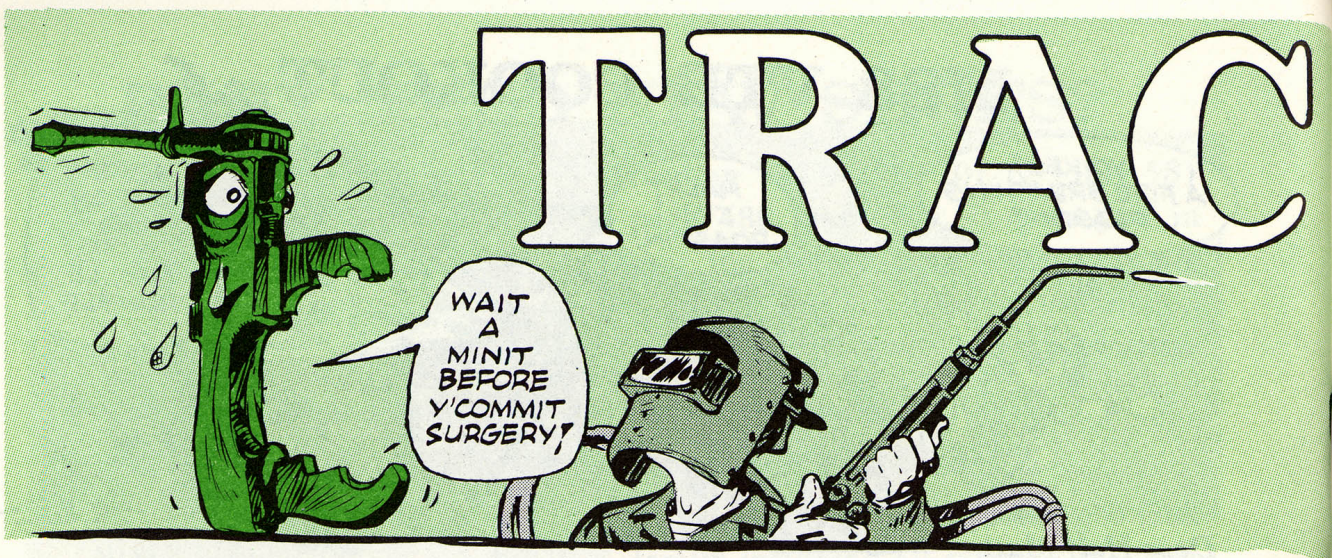
You use the intermediate position only when towing an occupied disabled vehicle. The thing to do then is to try and keep your engine RPM down to a reasonable figure. Then you shouldn't have any problem with cooked tail lights.

If you still have trouble, the fix you show could be applied if you got permission from your local area commander.

If you get a late model M88 there is no problem because it comes with solid sheet metal tail light guards instead of the open-frame type.

Half-Mast





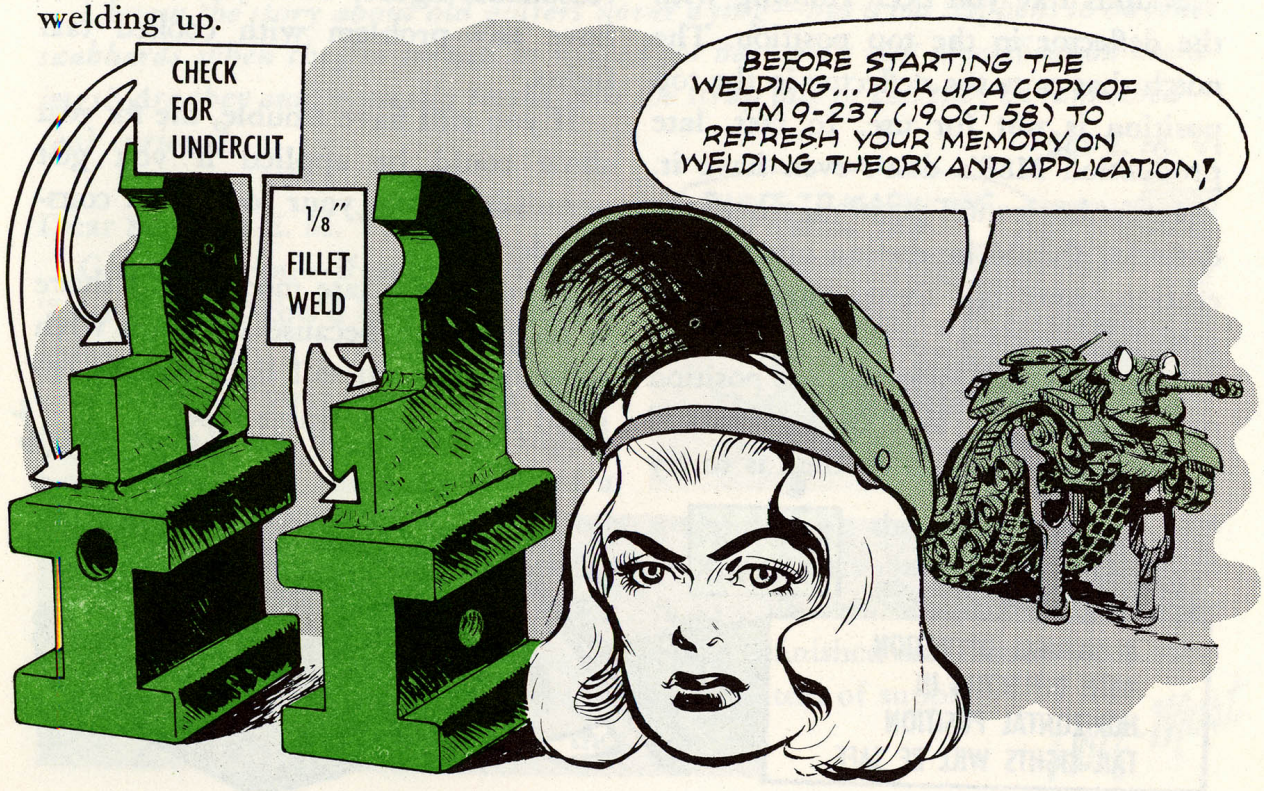
Reports've trickled in about some medium and heavy track fixtures (jacks) (FSN 5120-605-3926) that're not able to "stand the gaff".

Seems the jack hooks are breaking, which may be the fault of the jack or from handling it.

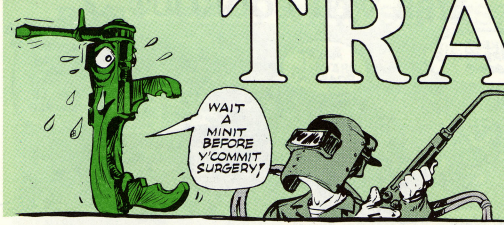
Some of the jacks in the supply system are modified versions from a couple of ol' vintage jacks, and didn't come out just right.

On t'other hand, the hooks can get broken if the jacks are hammered off the tracks.

The tell-tale marks for these modified babies are around the hook base or in the contour of the hook. The base weld may be undercut and the hook's contour shaved in so it missed getting a ⅛-in radius . . . both call for some welding up.



TRACK JACKS



Reports've trickled in about some medium and heavy track fixtures (jacks) (FSN 5120-605-3926) that're not able to "stand the gaff".

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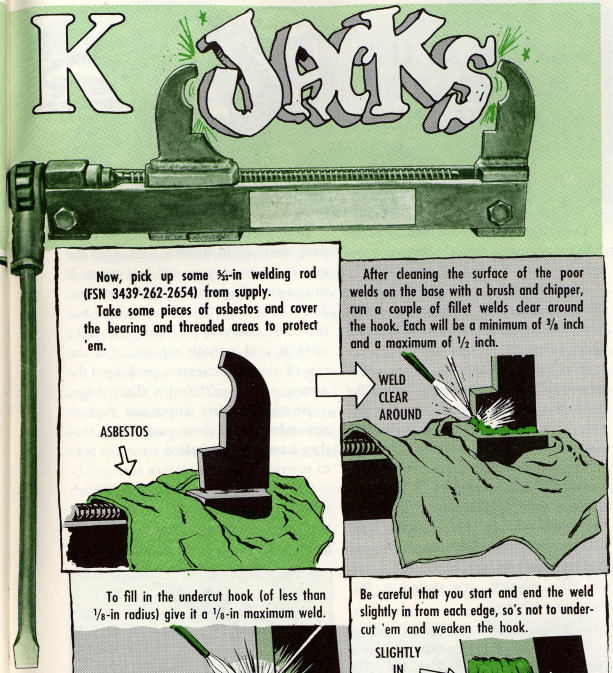
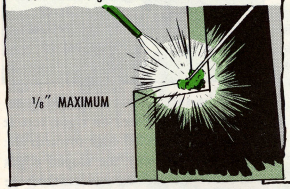


Now, pick up some 3/4-in welding rod (FSN 3439-262-2654) from supply.

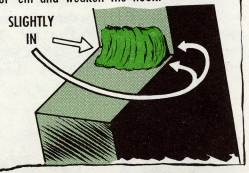
Take some pieces of asbestos and cover the bearing and threaded areas to protect 'em.

After cleaning the surface of the poor welds on the base with a brush and chipper, run a couple of fillet welds clear around the hook. Each will be a minimum of 3/8 inch and a maximum of 1/2 inch.

To fill in the undercut hook (of less than 1/8-in radius) give it a 1/8-in maximum weld.

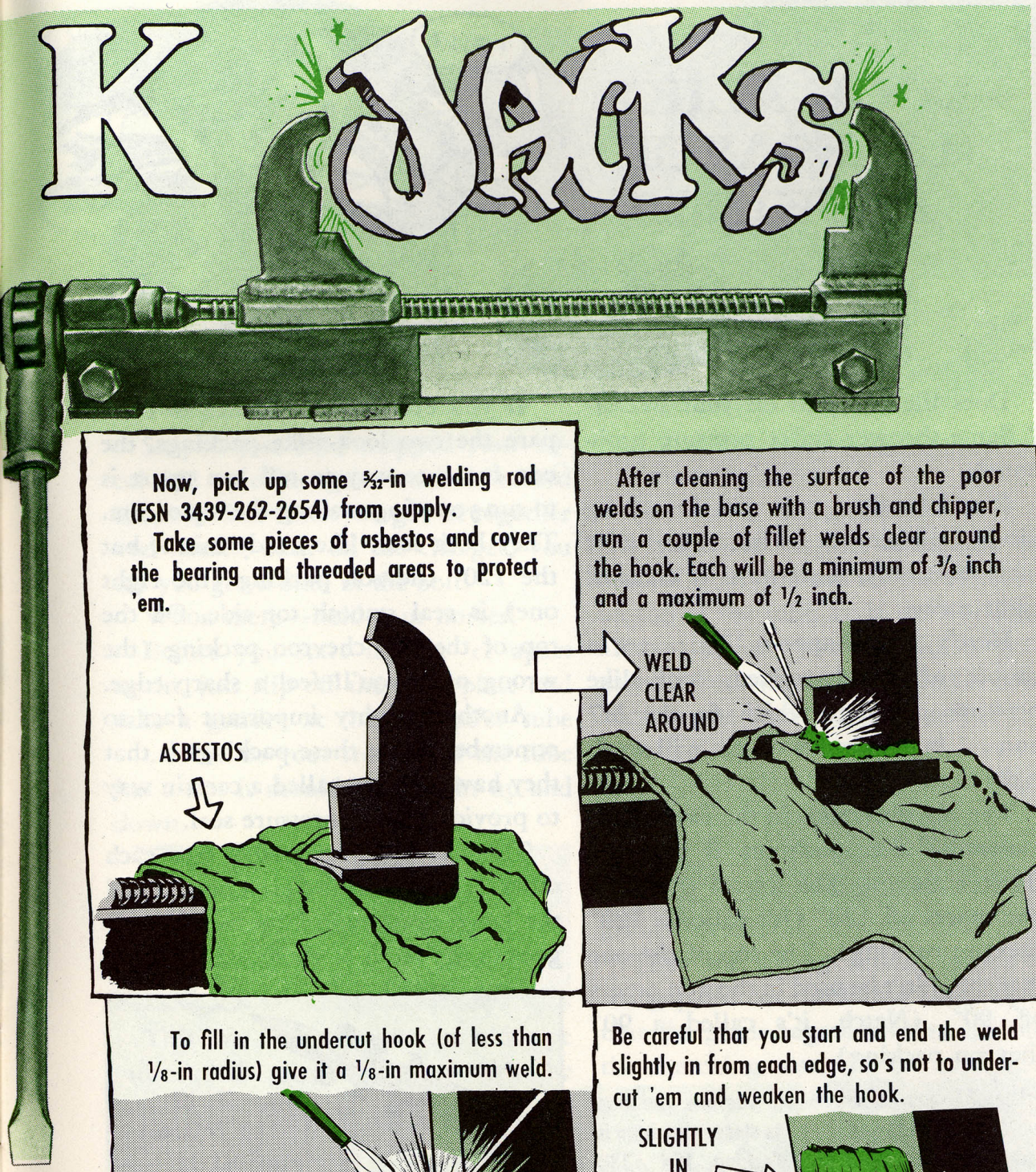


Be careful that you start and end the weld slightly in from each edge, so's not to undercut 'em and weaken the hook.



Remember, don't do your bangin' on those jacks to shake 'em loose from the tracks. Support the tracks with your OEM crowbar and just take 'em off.

K JACKS

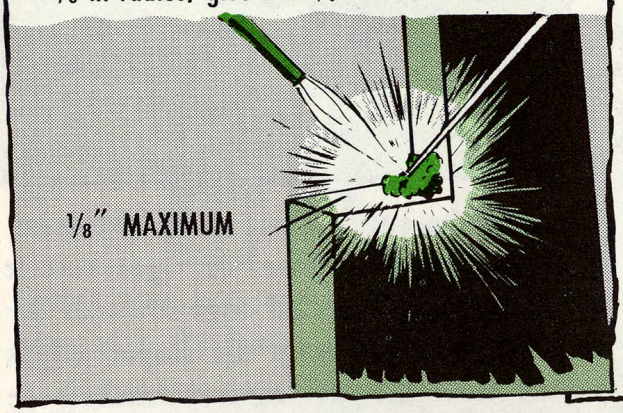


Now, pick up some 5/32-in welding rod (FSN 3439-262-2654) from supply.

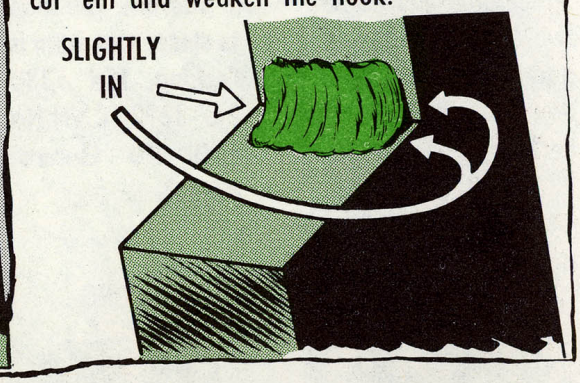
Take some pieces of asbestos and cover the bearing and threaded areas to protect 'em.

After cleaning the surface of the poor welds on the base with a brush and chipper, run a couple of fillet welds clear around the hook. Each will be a minimum of 3/8 inch and a maximum of 1/2 inch.

To fill in the undercut hook (of less than 1/8-in radius) give it a 1/8-in maximum weld.



Be careful that you start and end the weld slightly in from each edge, so's not to undercut 'em and weaken the hook.



Remember, don't do your bangin' on those jacks to shake 'em loose from the tracks. Support the tracks with your OEM crowbar and just take 'em off.

LOOK-ALIKE (LIFESAVER) PACKINGS

Does the M7 gun on your M2A1-7 flame thrower suffer pressure problems?

Could be the gun's got the wrong kind of packing in its barrel-and-inlet body assembly. Best have it checked right away.

Here's what happens. There are a couple of closely-related, look-alike pressure packings which fit the M7 gun . . . but, only one of 'em will work right in the gun.

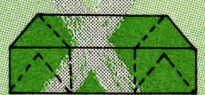
The big difference in the two white, molded Teflon packings is in their chevron design. The top of the right one tapers off 120° (it's called a 120° chevron packing). The top of the one that shouldn't be used in the gun tapers off 90°. (Natch, it's called a 90° chevron packing).

The M7 gun takes two of the 120° chevron packings, and here's how to ask for 'em: Packing, FSN 5330-973-1207 **(C VU No. 410, 120° Chevron angle).**

RIGHT

The one you want to steer away from is: Packing, FSN 5330-347-3892 **(C VH No. 410, 90° Chevron angle).**

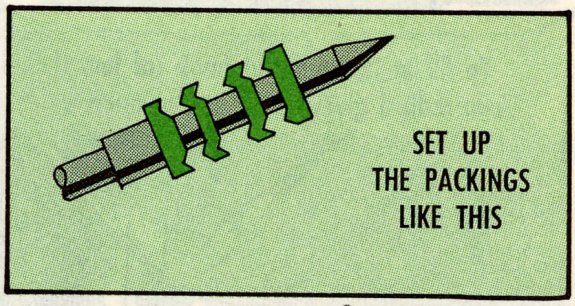
WRONG



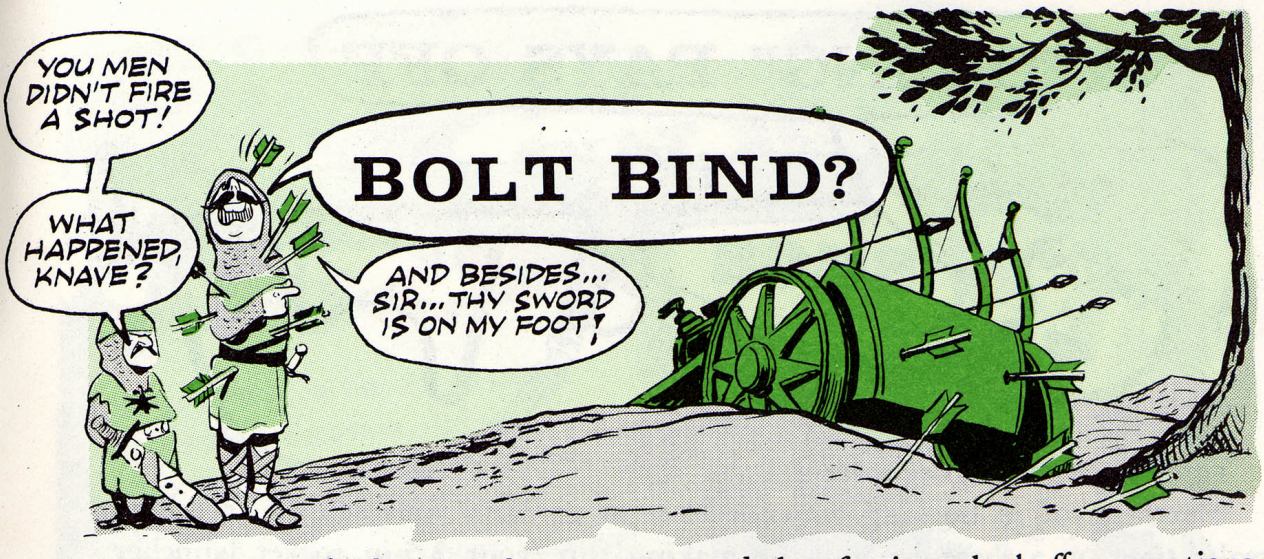
If you ever have a chance to compare the two look-alike packings, the one for sure way to tell 'em apart is to run your finger along the top of 'em. They both look like candy mints, but the 120° chevron packing (the right one) is real smooth top-side. On the top of the 90° chevron packing (the wrong one) you'll feel a sharp edge.

Another mighty important fact to remember about these packings is that they have to be installed a certain way to provide a good pressure seal.

They have to be nested into each other . . . not bucking each other. And the large open end of the nested pair goes to the front of the gun.



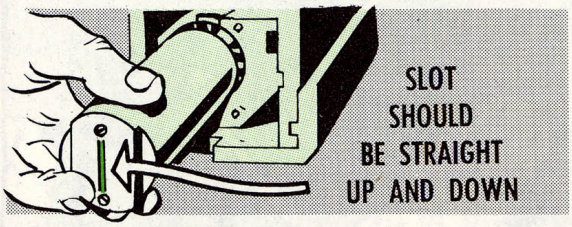
And be sure to put the packing retainer (metal washer) on right, too. It goes with its beveled edge towards the packings. That way the sloped edges will shove the packing against the bore of the inlet body and make a better seal.



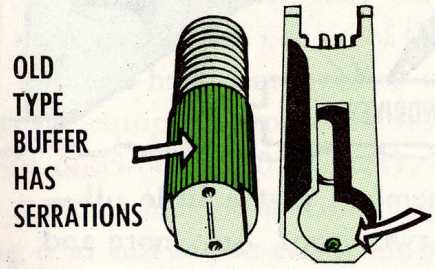
So you just field stripped your 50-cal M2 machine gun—and in record time too. But when you got 'er together and hauled back on the charger, you say you got a bind in the bolt!

Whoa there—hold your horses!

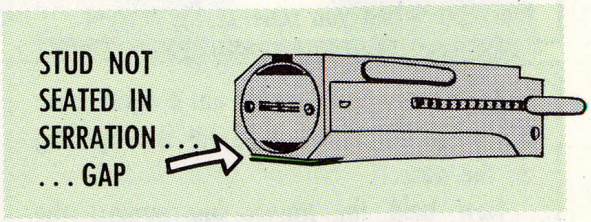
Before you start tearing 'er apart again, just slip off the back plate and take a gander at the oil buffer tube . . . could be your trouble. If the tube has a slot it should be straight up and down.



This slot means you've the old type buffer with serrations. And with the buffer and bolt sear stop set-up, you also have the buffer tube lock with a stud that fits into the buffer serrations . . . that's the rub.

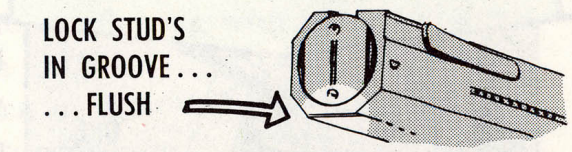


The buffer serrations are only at one end of the slot, and not all the way around. So if you can see the serrations on top of the tube, or if the slot is not almost vertical, you're going to get a gap between the lock and buffer body because the stud won't be seated in a serration.

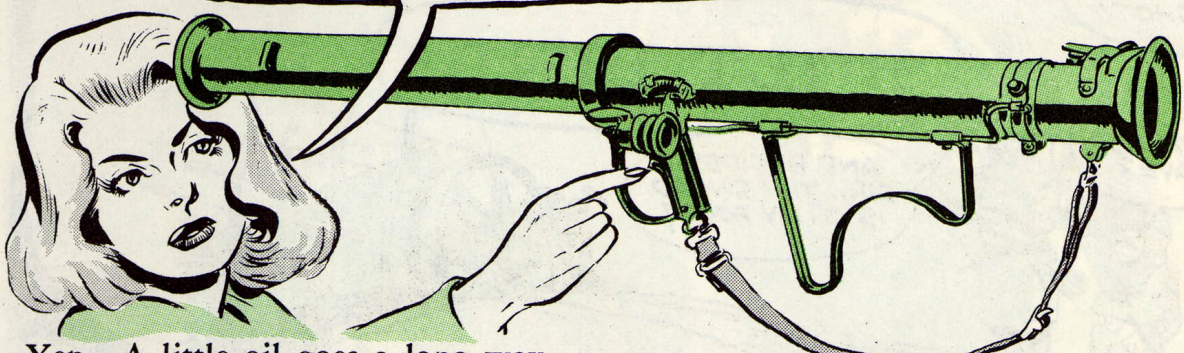


Then the spring action, caused by the gap, forces the buffer body up so that the guide lugs don't line up with the matching slots on the receiver—giving you a bind in the bolt.

So . . . if your M2 has you in a bind, man, check the buffer slot to make sure the lock stud's in the groove.



"OILING" PAYS OFF



Yep—A little oil goes a long way.

Whether you're bucking for a rocker to go with your stripes, trying to make time on a three-day pass or making sure your 3.5-in rocket launcher fires when you need it.

You're on your own, 'far as the rocker and the pursuit of R and R goes—but follow the scoop for lubing the electrical firing mechanism of the 3.5-in launcher like it says in TM 9-2002. You know how it goes. . . .

Remove the trigger grips.

Wedge the blade of a screwdriver against the front of the top plate until the trigger safety lug stops about one-eighth inch from the plate when you squeeze the trigger.

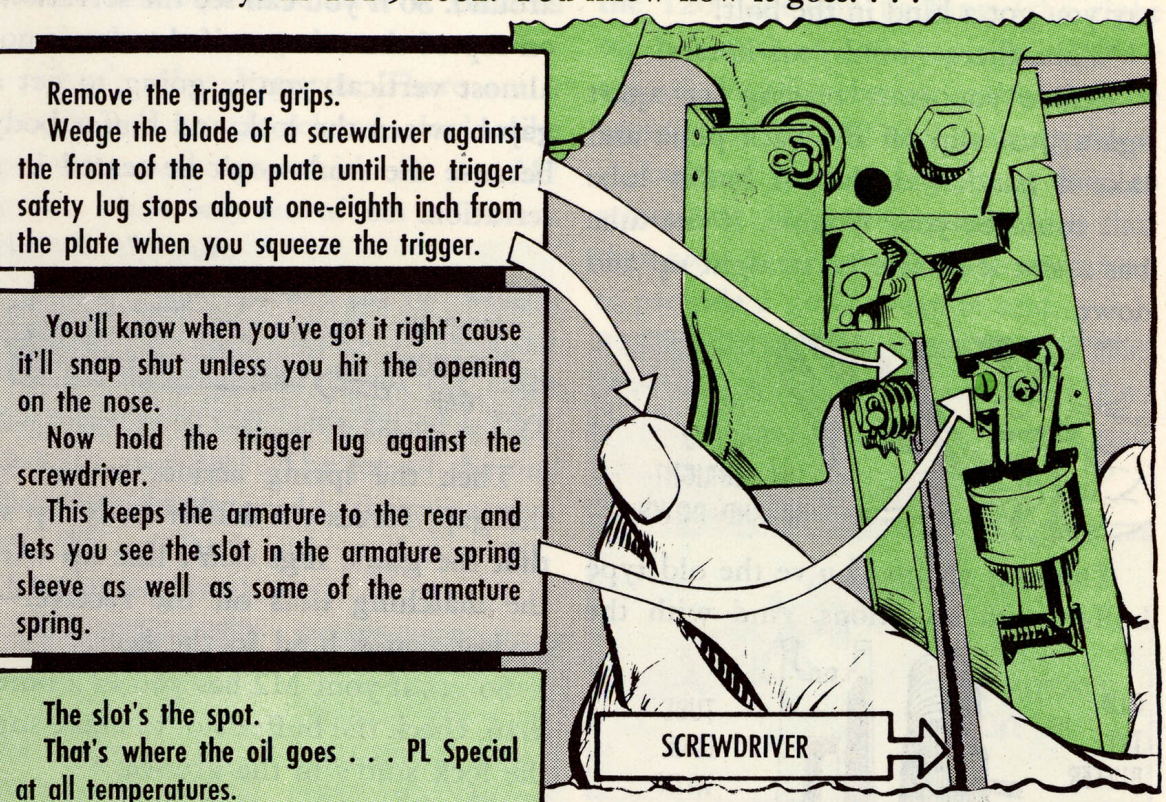
You'll know when you've got it right 'cause it'll snap shut unless you hit the opening on the nose.

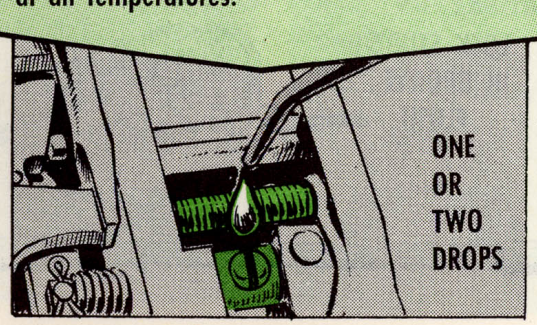
Now hold the trigger lug against the screwdriver.

This keeps the armature to the rear and lets you see the slot in the armature spring sleeve as well as some of the armature spring.

The slot's the spot.

That's where the oil goes . . . PL Special at all temperatures.

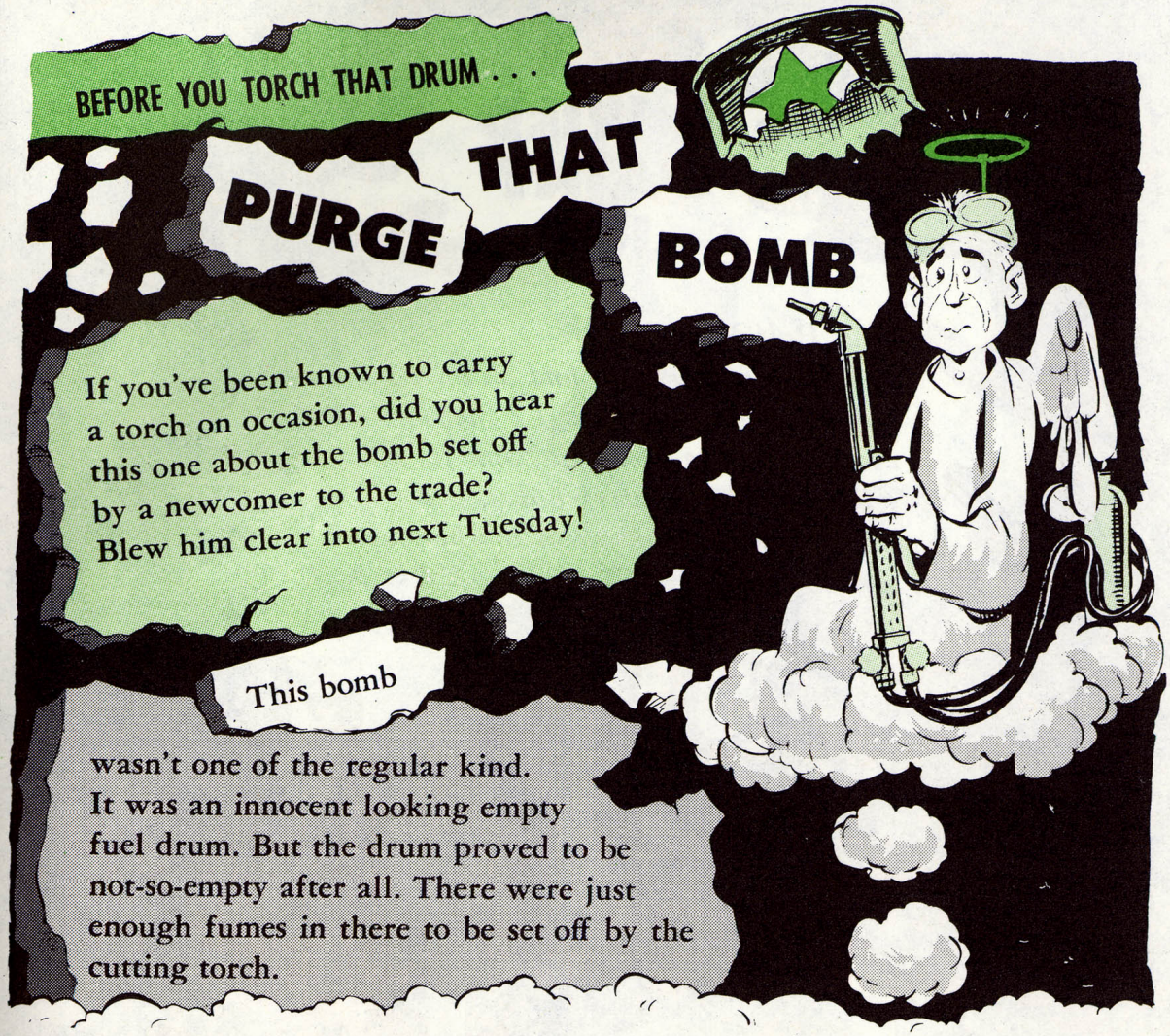




And, remember, **just a little oil**—like one or two drops. Any more and you'll louse up the entire trigger mechanism.

Lube the trigger mechanism monthly.

Then you can carry on with your other "oiling" projects. OK?



Could happen to anybody working on fuel and oil drums . . . if they don't heed the warning on explosion hazards. It's in black and white on page 40 of TM9-237 (17 Oct 58) "Welding Theory and Application."

You just never weld, cut, braze, or solder any empty container that has had flammable stuff in it until all of the fumes are taken out and the container is well vented.

So, before you use your Oxy-Acetylene Set No. 5 on any containers, use one of these methods to get rid of the fumes.

You can have 'em steamed out until all the fumes are gone. Your support has the equipment to do the steam job, including a combustible gas indicator, FSN 6665-664-4650 (Chem), to make sure all the fumes are steamed out.

Another method is to fill the container to overflowing with water and keeping it as full as you can while you work on it.

However, the latest purging poop is given in TB ORD 1047 (13 Feb 63). The new setup uses a chemical and water combination that's reliable and fast.

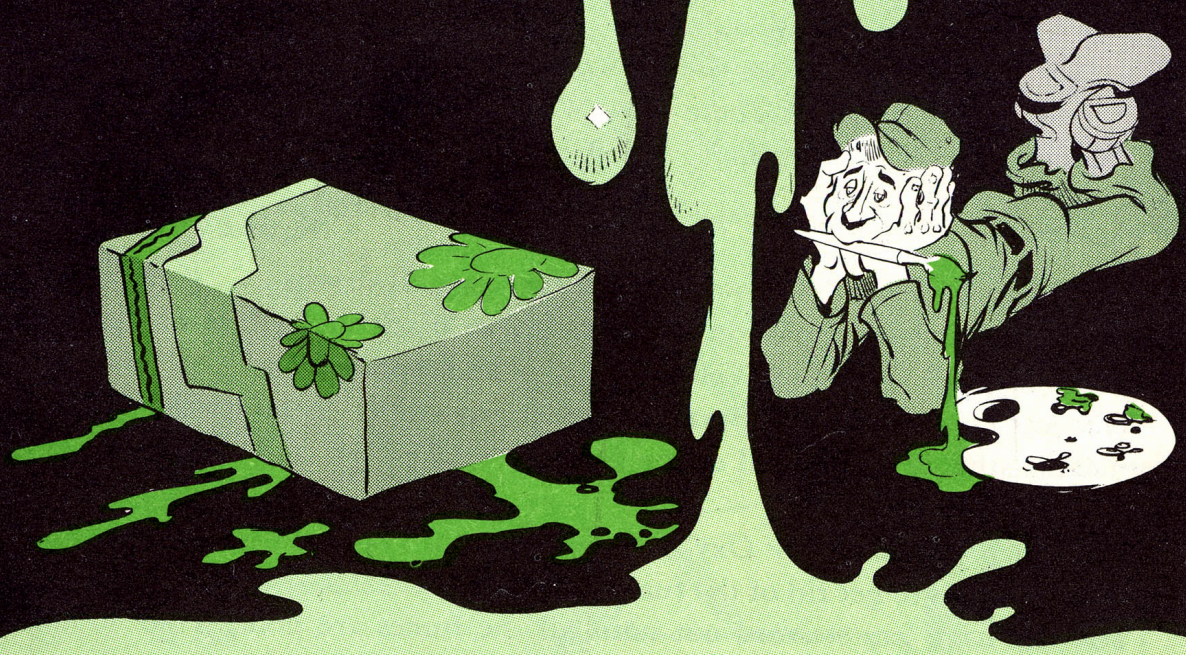
It may take a little longer to do a job when you purge a container of explosive vapors. But "it's better to be a little late, Private Murphy . . . than to be known as the late Private Murphy".

A WILD PAINT JOB

Dear Half-Mast,

I've been unable to find an FSN for the paint used on the Wild T2 theodolite and accessories. We need this paint for spot painting of the battery boxes. Is it permissable to paint them another color?

CWO A. C.



Dear Mr. A. C.,

No special paint has been set up as yet for use on your Wild T2 theodolites and their accessories. Most outfits have been using a lusterless or semi-gloss pea green enamel that closely matches the original color. If the battery box is all that is in question, you can paint it a lusterless OD.

Here's what you'll need: Battery box only—Enamel, lusterless, OD, FSN 8010-297-0586 (color X24087). All painted components (including battery box)—Enamel, lusterless, pea green, FSN 8010-840-7371 (color 34258), or Enamel, semi-gloss, pea green, FSN 8010-899-8875 (color 24272).

Half-Mast

Connie Rodd's BRIEFS

NO "Q'S" FOR WHEELS

"Q" services on tactical wheeled vehicles are no longer needed. You now pull semi-annuals in place of the quarterly. That's the word that has been teletyped world-wide to all major commands by DA message 334239 (10 Apr 63). The details will be passed down telling you that only semi-annual preventive maintenance services will be pulled. The services will be done every 3,000 miles or 6 months—whichever comes first—and you're to use the "Q" PM procedures in the vehicle's TM as a guide for the semi-annual.

REMEMBER

The procedure for towing a 2½-ton G749-series hydramatic truck rearward is in Change 5 to TM 9-8024. To be specific, the Change says when towing the GMC rearward with all wheels on the ground, put the transfer lever in DOWN NEUTRAL position and shift lever in the R (reverse) part of the slot. Do this even for short distances, like when you're just backing a dead truck into a shop or stall for repairs.

AS YOU WERE . . .

Chopper pilots, hold it! Don't blow your APH-5 helmet. Your chemical support's got the word . . . for the time being you can hang on to your E75 helicopter mask. An improved version of the helicopter mask is being standardized (as the M24 aircraft mask) so forget about swapping your E75 for an M17 field mask, like you may've heard before.

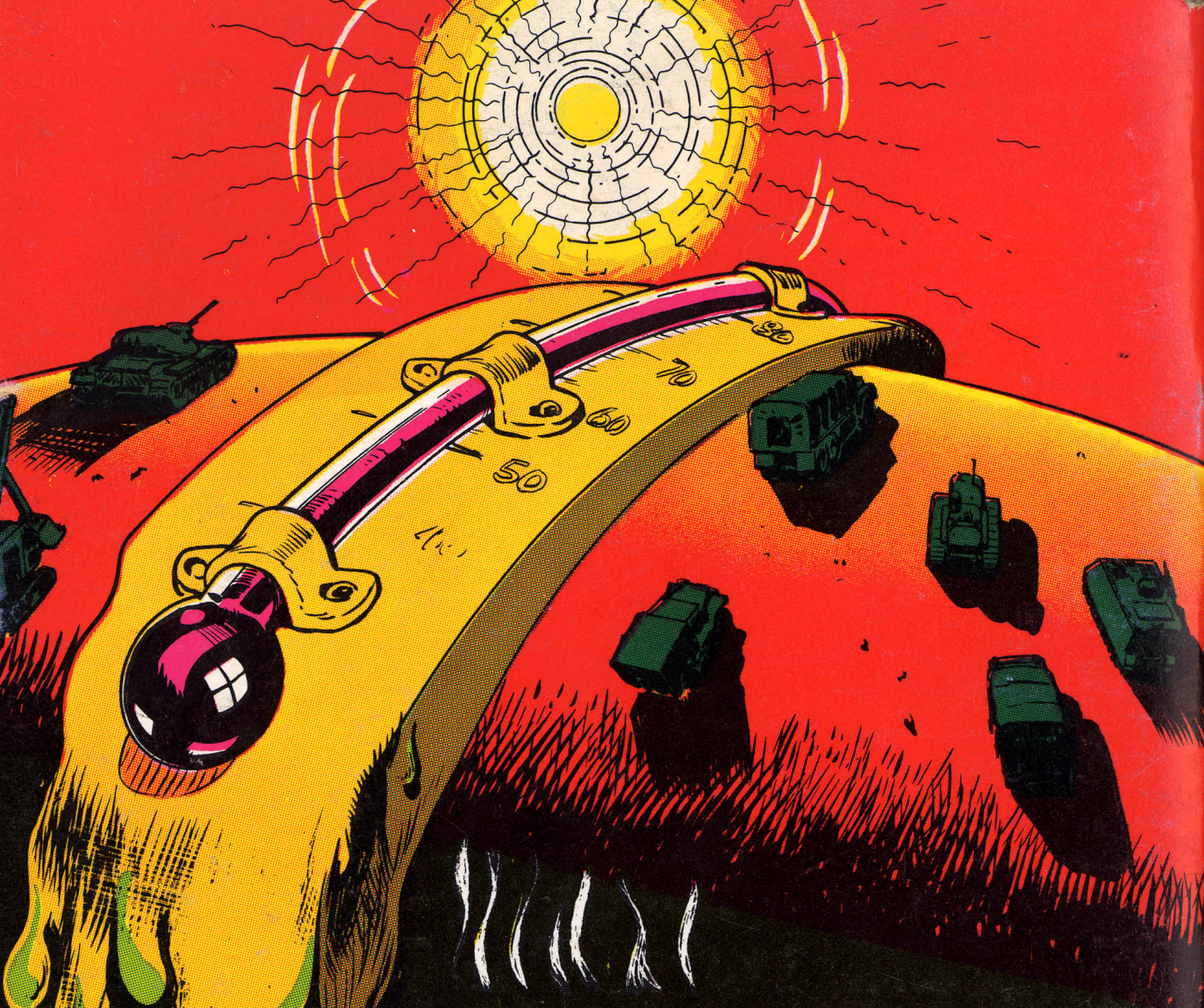
SANDS OFF

It's been said before—but it bears repeating. Don't, like never, sand your rifle stocks. To begin with, there's no authority for it—which means you're wide open for a creaming—and second, the operation calls for higher echelon knowhow and material. So, hands off . . . puhleeze.

FOR THE RECORDS

AR 345-215 (Nov 62) "Records Management TOE Units of Active Army and Army Reserve" gives the latest info on records . . . from how to keep'em, to when and **which ones** to dump. TM 38-750 maintenance records are discussed on pages 39-40. And supply records are covered on page 37.

Would You Stake Your Life on the Condition of Your Equipment?



HOT STUFF COMING UP!!

BE SURE COOLING SYSTEMS, FAN BELTS RADIATORS, HOSES, WATER PUMPS AND FANS ARE READY FOR THE HEAT WAVE